U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

PB-261 291

# Office of Research and Development (ORD) Publications Summary

Environmental Protection Agency, Washington, D C

Jun 75

EPA-600/9-75-001b

PB 261 291

ABSTRACTS
REPORT NUMBERS
TITLES
PROGRAM AREAS
ORGANIZATIONS
AUTHORS
EXTRAMURAL NUMBERS

# ORD PUBLICATIONS SUMMARY

JUNE 1975

U. S. ENVIRONMENTAL PROTECTION AGENCY
Office of Research and Development
Washington, D.C. 20460

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

## TECHNICAL REPORT DATA
*(Please read Instructions on the reverse before completing)*

| | | |
|---|---|---|
| 1. REPORT NO.<br>EPA-600/9-75-001b | 2. | 3. RECIPIENT'S ACCESSION NO. |
| 4. TITLE AND SUBTITLE<br>ORD PUBLICATIONS SUMMARY - June 1975 | | 5. REPORT DATE<br>June 1975 (Issuing date)<br>6. PERFORMING ORGANIZATION CODE |
| 7. AUTHOR(S)<br>Technical Information Division | | 8. PERFORMING ORGANIZATION REPORT NO. |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS<br>Office of Monitoring and Technical Support<br>Office of Research and Development<br>U.S. Environmental Protection Agency<br>Washington, DC 20460 | | 10. PROGRAM ELEMENT NO.<br>1RW103<br>11. CONTRACT/GRANT NO.<br>In-house |
| 12. SPONSORING AGENCY NAME AND ADDRESS<br>(Same as above) | | 13. TYPE OF REPORT AND PERIOD COVERED<br>Publications Summary 1973-1975<br>14. SPONSORING AGENCY CODE<br>EPA-ORD |

15. SUPPLEMENTARY NOTES

16. ABSTRACT

This summary is a current listing of the Office of Research & Development's final reports on in-house, grant, contract, and interagency projects. Reports are indexed by Title, Subject Area, Performing Organization, Personal Author, Report Number, Abstracts, and Grant, Contract, or Interagency Agreement Number to aid the reader in identifying reports of interest. Instructions on how to order copies of reports are on the inside of the front cover.

17. KEY WORDS AND DOCUMENT ANALYSIS

| a. DESCRIPTORS | b. IDENTIFIERS/OPEN ENDED TERMS | c. COSATI Field/Group |
|---|---|---|
| Summaries<br>Technical reports<br>Research projects<br>Corporate authors<br>Information retrieval<br>Library Science<br>Bibliographies | | 05B |

| | | |
|---|---|---|
| 18. DISTRIBUTION STATEMENT<br>Available to the Public | 19. SECURITY CLASS *(This Report)*<br>Unclassified | 21. NO. OF PAGES<br>164 |
| | 20. SECURITY CLASS *(This page)*<br>Unclassified | 22. PRICE<br>$6.75 - 3.00 |

EPA Form 2220-1 (9-73)

EPA-600/9-75-001b
June 1975

# ORD PUBLICATIONS SUMMARY

by

TECHNICAL INFORMATION DIVISION
Office of Monitoring & Technical Support

U.S. Environmental Protection Agency
Office of Research and Development
Washington, D.C. 20460

# FOREWORD

This is the second issue of the Office of Research and Development's (ORD's) quarterly **ORD PUBLICATIONS SUMMARY.** This **Summary** is intended to provide a current listing (since July 1973) of ORD's final reports on in-house, grant, contract, and interagency projects. A New Report Abstracts Section is included in the **Summary** to provide brief abstracts of recently printed reports, as well as indices by Title, Program Area (subject), Performing Organization, Personal Author, Report Number, and Grant, Contract, or Interagency Agreement Number to aid the reader in identifying reports of interest. Instructions on how to order copies of reports are on the inside of the front cover. Comments on how this **Summary** would serve the reader more effectively would be appreciated.

Wilson K. Talley
Wilson K. Talley
Assistant Administrator for
Research and Development

# CONTENTS

Page

How to Order . . . . . inside front cover

Foreword . . . . . iii

Series Description . . . . . vi

Users' Guide . . . . . vii

New Report Abstracts Section . . . . . 1

Bibliographic Section

600 Reports . . . . . 17

650 Reports . . . . . 23

660 Reports . . . . . 43

670 Reports . . . . . 56

680 Reports . . . . . 75

Title Index . . . . . 77

Program Area Index . . . . . 97

Performing Organization Index . . . . . 121

Personal Author Index . . . . . 139

Grant, Contract, Interagency Agreement Number Index . . . . . 151

Preceding page blank

# SERIES DESCRIPTION

The U.S. Environmental Protection Agency (EPA) was formed in late 1970 from programs in several executive agencies, i.e., the Department of Health, Education, and Welfare (air pollution, solid waste, radiation, water hygiene, and noise), the Department of the Interior (water pollution), and the Department of Agriculture (pesticide regulation).

In July 1972, EPA's Office of Research and Monitoring (now Office of Research and Development, ORD) established an office-wide series of designations within which each research report would be published. The series can be used to describe the general thrust of EPA research and development and also to aid in identifying the use for each report. The present numbering system and cover color for each report is keyed to this Series Description. In addition, ORD's research program has been categorized into 10 major Program Areas that serve to identify subject matter: these are described beginning on page vii.

### SERIES 1 – ENVIRONMENTAL HEALTH EFFECTS RESEARCH (yellow covers)

Assigned to Series 1 are projects and studies relating to the tolerances of man for unhealthful substances or conditions, generally assessed from a medical viewpoint. In addition to toxicology and other medical specialties, study areas include physiological or psychological studies, and biomedical instrumentation and health research techniques utilizing animals—but always with intended application to human health protection.

### SERIES 2 – ENVIRONMENTAL PROTECTION TECHNOLOGY (light blue covers)

Within Series 2 is research performed to develop and demonstrate instrumentation, equipment, and methodology to repair or prevent environmental degradation from point and nonpoint sources of pollution. This work provides the new or improved technology necessary to control and treat pollution sources so that environmental quality standards can be met.

### SERIES 3 – ECOLOGICAL RESEARCH (light green covers)

In Series 3 are grouped the investigations on pollution effects on plant and animal species and on materials. Problems are assessed for their long- and short-term influences and studies include formation, transport, and pathway studies to determine the fate of pollutants and their effects. This work provides the basis for setting standards to minimize undesirable changes in living organisms in the aquatic, terrestrial, and atmospheric environments.

### SERIES 4 – ENVIRONMENTAL MONITORING (gray covers)

Research conducted to develop new or improved methods and instrumentation for identifying and quantifying environmental pollutants is found in Series 4. Also included are studies to determine the ambient concentrations of pollutants in the environment, or the variance of pollutants as a function of time or meteorological factors, or both.

### SERIES 5 – SOCIOECONOMIC ENVIRONMENTAL STUDIES (rust covers)

Included in Series 5 is research devoted to the socioeconomic impact of environmental problems, i.e., recycling and other recovery operations whose emphasis is on monetary incentives and nonscientific realms of legal systems, cultural values, and business systems. Because the interdisciplinary scope of system evaluations and environmental management, these reports are included in Series 5.

### SERIES 6 – SCIENTIFIC AND TECHNICAL ASSESSMENT REPORTS (STAR) (dark blue covers)

In Series 6 are assessments of the available scientific and technical knowledge on major pollutants that would be helpful in regulatory decision making or assessments of a major area of completed study. The series is used to present objective evaluations of existing knowledge— evaluations that point out the extent to which it is definitive, the validity of the data on which it is based, and the uncertainties and gaps that may exist. (Most of the reports are multimedia in scope and focus on single media only to the extent warranted.)

### SERIES 9 – MISCELLANEOUS (covers of various designs)

Series 9 is used for all reports issued by ORD not applicable to one of the series described above.

# USERS' GUIDE

This volume contains an abstract section, a bibliographic section, and six indices. Within each index, reports are cross-referenced to the Bibliographic Section by report number.

## NEW REPORT ABSTRACTS SECTION

This section contains a brief abstract of each recently printed report. If no source is shown in the Bibliographic Section, the report is not yet available. Future issues of the **Summary** will note those reports for which an abstract has been published and indicate the issue in which the abstract appeared; e.g., ---Abstracted 600/9–74–001a---.

## BIBLIOGRAPHIC SECTION

In the Bibliographic Section is a numerical listing of reports published since July 1973. The source of each report follows the bibliographic entry, and how to order instructions are given on the inside front cover.

## TITLE INDEX

All reports are listed alphabetically by title; "A," "An," and "The" have been dropped from the beginnings of titles.

## PROGRAM AREA INDEX

This Program Area Index provides a broad subject-matter index; each report is listed once, alphabetically by title, under the Program Area concerned with the report's research. These Program Areas contain sub-areas called Program Elements; these are the numbers appearing in the second column of the Bibliographic Section (e.g., 1BB037). Reports not falling within these Program Areas, such as bibliographies or annual reports, are listed under Miscellaneous Reports.

The objectives and responsibilities within each of the 10 Program Areas are:

**HEALTH EFFECTS**—assessing health hazards associated with environmental pollution from a number of media and categories including air, water, pesticides, radiation, and noise. Major program emphasis is devoted to evaluating, through community epidemiologic studies, the effects of exposure to common pollutants on sensitive health indicators and to assessing at the community level, the effects of pollutants on human physiology.

**ECOLOGICAL PROCESSES AND EFFECTS**-determining the effects of air and water pollutants on the structure and function of ecosystems and on biotic and abiotic subcomponents of these ecosystems. Programs on aquatic systems determine the acute and chronic effects of pollutants (e.g., temperature, pesticides, heavy metals) on life stages of fresh and marine water fish, invertebrates, and their food-chain organisms. Specific air pollutant studies include the effects of nitrogen oxides, sulfur oxides, hydrocarbons, and oxidants on representative terrestrial ecosystems. Also included are studies seeking alternative methods of pest control that have great specificity on target organisms and little or no effects on nontarget organisms.

**MUNICIPAL POLLUTION CONTROL**-developing and demonstrating technology applicable to controlling and treating wastewaters generated in and discharged from the urban environment. The entire urban drainage system is included, from sewer systems carrying stormwater and sewage (combined sewers) and from urban stormwater discharges.

**INDUSTRIAL POLLUTION CONTROL**-demonstrating the best practicable, best available, and zero pollution control technology (with emphasis on water reuse and product-by-product recovery) for manufacturing industries defined by the Standard Industrial Classification, Major Groups 19–39.

**NONPOINT POLLUTION CONTROL**-developing means to (1) predict and assess the impact of pollutants from nonpoint sources on waters from various land-use patterns; (2) determine the reduced pollutant load that results from implementing specific nonpoint source controls and the costs of achieving these reductions to meet established water quality standards; (3) establish limits of reasonable controllability for nonpoint sources; and (4) establish specific control guidelines for nonpoint sources.

# USERS'GUIDE

Specific objectives include developing cost-effective, nonpoint management systems (with alternatives appropriate for various geographical and geological areas) for activities in: agriculture including forestry and logging operations; agricultural runoff; irrigation return flows; confined animal feeding; aquaculture and disposal of nonagricultural sludges; active mining operations and abandoned mining sites; hydrological modifications; and oil and hazardous material spills.

**AIR POLLUTION CONTROL**-ensuring the availability of control devices, processes, and approaches for control of air pollutants at their source. Currently, activity is in research and development of control technology in four principal areas: (1) sulfur oxides— historically, emissions from electric power generating plants; recently, from industrial combustion and process sources; (2) nitrogen oxides—in the area of combustion control and nitrogen oxide effluent treatment processes; (3) particulates—the need for fine particulate control technology and more economic conventional technologies; and (4) hazardous and other pollutants—those not included in the above three categories.

**DATA AND INFORMATION RESEARCH**-planning, coordinating, establishing, reviewing, and assessing research; and developing and demonstrating programs aimed at effective research information and data systems, including multimedia or multipollutant data analysis and special data handling and processing studies.

**EQUIPMENT AND TECHNIQUES**-developing methods and instrumentation for the detection, identification, and quantification of pollutants in all media at the lowest significant concentration. Included are state-of-the-art reviews, prototype instrumentation development, and pioneering research studies related to developing new or significantly improved analytical methods or instrumentation.

**QUALITY ASSURANCE**-planning, establishing, and coordinating an Agency-wide standardization and quality control program to ensure that environmental data produced by Federal, State, and local agencies are compatible, accurate, and legally defensible; and ensuring the selecting, standardizing, and publishing of procedures and methods for sampling and analyzing environmental pollutants.

**SOCIOECONOMIC RESEARCH**-developing and demonstrating analytical and management techniques required to implement Agency programs at the national, regional, and local levels. Interdisciplinary research is focused on the analysis of three general areas: (1) ecological impact—effects of various environmental policies and development of comprehensive environmental planning and management capability; (2) resources—economic aspects of environmental actions including cost-benefit, cost-risk benefit, and trade-off analysis; and (3) implementation and methods—developing forecasting capability to anticipate long-range impact of human and institutional activities on the environment.

## PERFORMING ORGANIZATION INDEX

This is an alphabetical listing of the organizations that actually conduct ORD research projects. For grants or contracts, the organization is the grantee or contractor; for in-house reports, the organization is the EPA laboratory or office.

## PERSONAL AUTHOR INDEX

The Personal Author Index lists alphabetically all authors of reports contained in the Bibliographic Section.

## GRANT, CONTRACT, INTERAGENCY AGREEMENT NUMBER INDEX

This index contains a listing of ORD Contract, Grant, and Interagency Agreement numbers for which a final report has been produced. For each number listed the applicable report number is cross-referenced.

# NEW REPORT ABSTRACTS SECTION

**600/1-75-002 PE 1CA046 ROAP/TASK PEMP GRANT NO. P5-01-1805**

**Formation of Halogenated Organics By Chlorination of Water Supplies BY J. C. Morris, Harvard University Cambridge, MA**

Available literature on the formation of halogenated organic compounds during the chlorination of water supplies has been reviewed critically. Types of organic compounds likely to be encountered in natural waters have been surveyed and various known or prospective reactions of dilute aqueous chlorine with these types of compounds have been discussed. It is concluded that two principal types of chlorination reaction are expected: (1) electrophilic aromatic chlorination as in the long-known formation of chlorophenols; and (2) electrophilic chlorine addition to activated double bonds like that of enolacetone. Chloroform or other haloforms may occur as end porducts of exhaustive chlorination in either case. General substitution reactions of chlorine are unlikely however. So carbon tetrachloride or fully chlorinated higher hydrocarbons are not probable products of water chlorination. Possible methods for minimizing the concentrations of halogenated organic compounds in municipal supplies have been outlined. These include pretreatment methods, such as coagulation or preozonation to reduce amounts of percursors to the halogenated compounds, and posttreatment methods, such as carbon adsorption or aeration to remove halogenated compounds after their formation. Needed research has been described. EPA CONTACT: Gorchev, H.

**600/2-75-003 PE 1GB090 ROAP/TASK 21 AXV IN-HOUSE PROJECT**

**Federal Aircraft Noise Research, Development, and Demonstration Programs: FY 73 – FY 75 Noise Technology Staff, EPA Washington, DC**

The Interagency Aircraft Noise Research Panel was established by the Environmental Protection Agency to aid EPA in fulfilling its responsibility for coordinating the Federal noise research activities. This report is the first prepared by the panel and provides an inventory of current and planned Federal aircraft noise RD&D programs. The Federal agencies which sponsor aircraft noise RD&D are the National Aeronautic and Space Administration, the Department of Transportation, the Department of Defense, the National Science Foundation, and the EPA. The report is organized by technical areas with each agency's programs presented under the appropriate technical area. Emphasis is on fiscal years 1974 and 1975, but summary information on fiscal years 1973 and 1976 is also included. The appendix contains detailed programmatic information as furnished by the Federal agencies on their aircraft related RD&D activities. EPA CONTACT: Berkau, G. 202-755-0449

**600/2-75-004 PE 1BB034 ROAP/TASK 21 ASY CONTRACT NO. 68-01-0197**

**Contributions of Urban Roadway Usage to Water Pollution BY D. G. Shaheen, Biospherics, Inc. Rockville, MD**

Street surface contaminants are deposited on roadways from many sources within an urban area. Industrial operations, land use activities, fallout of air pollutants, roadway usage and other activities contribute to the loading of particulates on urban roadways. These materials are then carried into receiving waters by storm runoff where they constitute a substantial portion of the overall water pollution problems of cities. Metropolitan Washington, D.C., with its low background of industrial emissions, was the area chosen for study of contributions of motor vehicle usage to urban roadway loading factors. Specific roadway study sites within this area were selected so as to provide minimal interference from nontraffic-related land use activities and thus isolate, as much as possible, the traffic-related depositions. Motor vehicular traffic is directly or indirectly responsible for deposition of substantial quantities of materials on roadways in urban areas. Significant levels of toxic heavy metals and asbestos and slowly biodegradable petroleum products and rubber are deposited directly from motor vehicles along with large quantities of particulate materials contributed indirectly by traffic. The particulates contributed indirectly by traffic are largely inorganic, but have associated with them solids and nutrients which represent a serious source of water pollutants in all metropolitan areas. EPA CONTACT: Condon, F.

**600/2-75-005 PE 1BB033 GRANT NO. 803046-01**

**Municipal Water Pollution Control Abstracts for 1974 BY J. S. Murphy, Franklin Institute Research Laboratories Philadelphia, PA**

The Franklin Institute Research Laboratories, Science Information Services has prepared for the Environmental Protection Agency a monthly current-awareness abstracting bulletin, the Municipal Technology Bulletin (MTB), Volume 2, 1974, which deals with methods of municipal waste water treatment, problems of water quality, and water pollution control. Under the same grant, the Science Information Services Department has provided 360 MTB abstracts, as well as 1440 additional abstracts, to the WRSIC data bank as sole supplier of municipal waste water treatment input and center of competence for Water Resources Scientific Information Center. The Municipal Technology Bulletin informs researchers, consultants, engineers, and government officials of current developments described in over 4000 technical journals, both domestic and foreign. The topics covered in MTB, Volume 2, and in the WRSIC input include: storm water runoff; tunnel technology and sewer systems; biological, chemical, and physical methods of waste water treatment; waste disposal alternatives; treatment plant operation and automation; analytical techniques for water quality measurement; mathematical, statistical, and simulation model studies; and construction and equipment for pollution control. The 1800 abstracts representing 1974 input to the WRSIC data bank have been arranged in chronological order by accession number within subject areas. A list of the 360 abstracts which appeared in the Municipal Technology Bulletin is provided. Included are a subject index, author index, and journal list. (Prague-FIRL) EPA CONTACT: Tobin, P.

# NEW REPORT ABSTRACTS SECTION

**600/2–75–006 PE 1AB013 ROAP/TASK 21 ADE 24 IAG NO. IAG-134(D)**

**Detailed Cost Estimates For Advanced Effluent Desulfurization Processes BY G. G. McGlamery, R. L. Torstrick, W. J. Broadfoot, J. P.** Simpson, L. J. Henson, S. V. Tomlinson, and J. F. Young, Tennessee Valley Authority Muscle Shoals, TN

The magnesium carbonate process of water treatment has replaced alum in a portion of two water plants in full scale studies conducted over the past two and one-half years. This new water treatment technology was compared to the presently used alum process in parallel treatment using identical units in Montgomery, Alabama, and Melbourne, Florida. The results indicate a number of significant advantages; primarily that the existing problem of sludge disposal in Melbourne's case is completely eliminated and at Montgomery is greatly reduced. All water is recycled within the process along with the three basic water treatment chemicals - lime, magnesium bicarbonate and carbon dioxide. Other advantages found were increased floc settling rates, simplicity of operation and control, reduced costs when sludge treatment and disposal costs are considered, and more complete disinfection. In Melbourne's case, considerable energy would be conserved by on-site lime recovery. EPA CONTACT: Shackelford, J.

**600/2–75–009 PE 1AB014 ROAP/TASK PEMP 02 CONTRACT NO. 68–01–0483**

**Oil Shale Air Pollution Control BY E. E. Hughes, P. A. Buder, C. V. Fojo, R. G. Murray, and R. K. White, Stanford Research Institute Menlo Park, CA**

This study evaluates the air pollution potential of emissions of particulates, sulfur dioxide, oxides of nitrogen, and hydrocarbons from the anticipated development of an oil shale industry. The analysis is based primarily on the published description of a TOSCO II reporting process as planned for commercial use by the Colony Development Operation. The technology, processes, plans, projections, and environmental impacts of oil shale development are reviewed. The results of dispersion model calculations of concentrations of pollutants in ambient air near oil shale plants employing TOSCO II and in situ processes are presented. These calculations for oil shale plants employing TOSCO II and in situ processes are presented. These calculations for the TOSCO II plant assume that best available controls are applied to the process planned by Colony. Requirements for additional control are estimated by comparing calculated ambient air quality with standards. Options for supplying the additional control indicated for particulate and sulfur dioxide are identified. EPA CONTACT: Johnson, J.

**600/4–75–001 PE 1HA325 CONTRACT NO. 68–01–2442**

**Directory of EPA, State and Local Environmental Quality Monitoring and Assessment Activities BY J. W. Scotton, and K. T. Mullen, Office of** Monitoring Systems, EPA Washington, DC BY J. Whitman, and R. Citron, Smithsonian Institution Cambridge, MA

The directory describes State and local environmental quality monitoring programs of the United States. It also includes the Environmental Protection Agency's (EPA) national programs and systems which collect, analyze and evaluate these data. It will serve a useful need as a reference and guide for more detailed information. EPA CONTACT: Scotton, J.

**600/5–75–005 PE 1HA098 ROAP/TASK 21 AKL 25 GRANT NO. 802443**

**Performance Controls for Sensitive Lands: A Practical Guide For Local Administrators BY C. Thurow, W. Toner, and D. Erley, American Society** of Planning Officials Chicago, IL

This report is to be used as a handbook by local planning officials in planning for and regulating the use of five distinct natural areas: streams and creeks, wetlands, woodlands, hillsides, and groundwater and aquifer recharge areas. Each section is devoted to the discussion of local regulation of land use in areas identified as "sensitive"; and each area is discussed in terms of its ecology and value to the public, current regulatory practices, and recommended programs for regulating the area. Also included are appendices showing where and how to go about getting technical assistance from existing governmental agencies and examples of local ordinances for protecting the environmentally sensitive areas. The final section is a monograph on environmental performance standards, the result of a preliminary study on the feasibility of extending the performance standard concept used in industry to regulation of the environment. Its purpose is to explore this possiblity and to suggest new areas for research. EPA CONTACT: Reiff, I.

# NEW REPORT ABSTRACTS SECTION

**600/5–75–006 PE 1BA030 ROAP/TASK 21 ARA 02 CONTRACT NO. 68–01–1845**

**Environmental Base and Management Study – Atchafalaya Basin, Louisiana BY S. M. Gagliano, and J. L. Van Beek, Louisiana State University** Baton Rouge, LA

The present report attempts to develop an alternative water management scheme for the Atchafalaya Basin. In the development of this scheme, the Basin is viewed as a product of the interaction between physical, chemical, biological, and human systems. This allowed the division of the area into environmental management units within which environmental conditions and processes and human use are similar. Recognizing the overriding need to use the Basin as a floodway, the options for water resource management were further evaluated through an analysis of trends in the basin environment resulting from either natural processes or human impact related to various uses. Much emphasis is placed on the requirements for management of overflow swamp areas, which form the most productive biological resource of the Basin. Most essential to this type of environment is an annual influx of water from the adjacent stream channels through overbank flooding, unimpeded movement of inflowing water through the swamp, and drainage from the lower end. The major threat to the overflow swamp environment is the present influx of sediment, insufficient overbank flooding, and insufficient interior circulation. EPA CONTACT: Reiff, I.

**600/5–75–007 PE 1HA093 ROAP/TASK 09 AFD 07 CONTRACT NO. 68–01–2250**

**Financial Incentives and Pollution Control: A Case Study BY T. A. Ferrar, A. B. Brownstein, J. D. Simpson, and S. Streiter, Pennsylvania State** University University Park, PA

Confronted with shortages of low-sulfur content residual fuel oil, several air-pollution control authorities in the northeastern states were forced to relax air-quality standards during the winters of 1972-73 and 1973-74. The authorities did so by granting variances to their sulfur-content standards for residual fuel oil. The characteristics of these variances provide the social test-tube for this analysis. The report examines alternative policies such as direct regulation, fuel-oil surcharges, emission taxes and quantity control. EPA CONTACT: Rose, M.

**600/5–75–008 PE 1HA098 ROAP/TASK 21 AKL 13 GRANT NO. 802423**

**Land Use Decision Methodology for Environmental Control BY K. Wickersham, R. P. Hansen, and A. G. Melcher, Rocky Mountain Center** on Environment Denver, CO

This report proposes an ecologically responsible land use decision-making system for local, regional and, to an extent, state governments. Referred to as LUDMS, it is based on conclusions that local governments have not dealt effectively with land use problems because traditional planning and land use control devices are unecological, unresponsive and unsystematic. The fundamental premise of LUDMS is that environmentally responsible land use planning and control must be based on valid ecological information combined with enlightened and informed public opinion. LUDMS makes use of several basic concepts, including policy planning (a process for combining public opinion with scientific and technical information to create community policies); use of an interdisciplinary team; public participation; an environmental resources inventory and analysis; a staff which understands and can communicate about ecology; legal devices for land use control; and positive community programs. "Model" state and local codes for implementing LUDMS are provided. EPA CONTACT: Redding, M.

**600/5–75–010 PE 1DB314 ROAP/TASK 02 AAE 06 GRANT NO. 801673**

**Measuring External Effects of Solid Waste Management BY W. Ramm, R. Schmalensee, R. Ramanathan, and D. Smallwood, Institute for Policy** Analysis La Jolla, CA

This study analyzes the environmental impact of using sanitary landfills for disposing of solid waste. The relevant economic theory concerned with the measurement and valuation of external effects is developed and previous empirical impacts of various activities are reviewed. Both the theoretical empirical evidence suggests that the costs and benefits of external effects are extremely difficult to measure directly but under certain circumstances property value studies can be used to obtain indirect estimates. A survey of the technology of sanitary landfills suggests that a properly designed fill will cause very little air and water pollution, but may impose visual and noise pollution on nearby residents. These hypotheses are tested with data on property surrounding four sanitary landfills in Los Angeles County. A model of the determinants of residential property values is formulated and estimated. The model includes variables which describe the characteristics of the property and variables which describe the relationship of the property to the fill. Statistical estimates of the parameters of the model indicate that proximity to and view of a sanitary landfill do not significantly reduce the market of assessed value of surrounding property. EPA CONTACT: Abel, F.

# NEW REPORT ABSTRACTS SECTION

**650/2–74–016 PE 1AA010 CONTRACT NO. 68–02–0579**

**Sampling Interface for Quantitative Transport of Aerosols IIT Research Institute Chicago, IL**

A sampling probe was designed, fabricated, and evaluated for quantitative transport of aerosols through a conduit from a source to a sensor. The probe consists of a porous metal tube encased in a manifold through which transpiration air was passed inward to provide a moving clean air sheath that minimized particle deposition on the walls. In Phase I, the quantitative mass transport of aerosols was investigated, and in Phase II, the preservation of size distribution of the transported aerosol was studied. A statistical analysis of the data conclusively demonstrates the effectiveness of the porous probe sampling concept. Tests at selected conditions show that the porous probe is effective in the preservation of size distribution. Optimization of the sample and transpiration flow ration is necessary for a given size range to obtain the most effective use of the porous probe concept. EPA CONTACT: Knapp, K. T.

**650/2–74–029 PE 1AA010 CONTRACT NO. 68–02–0546**

**Compact Sampling System for Collection of Particulates from Stationary Sources General Electric Company Philadelphia, PA**

This report summarizes the work performed on a program to design, fabricate, and evaluate a controller for automatically sensing and maintaining isokinetic conditions at the inlet of a particulate sampling nozzle. The key components developed on the program were the gas velocity sensor and a fluidic control amplifier. The sensor concept is based on a static pressure differential between the free air stream and the nozzle inlet. The fluidic control amplifier which interfaces directly with the sensor provides the control to automatically maintain isokinetic conditions. Field tests were performed on the engineering prototype system at both oil-fired and coal-fired power plant installations. Results of these tests showed that the sensor and controller can function with no degradation in performance under the adverse environment of representative power plant stacks. Temperatures up to 205°C and solid particulate concentration of 3.50 grams per cubic meter were encountered during the field testing.

**650/2–74–080 PE 1AB013 ROAP/TASK 21 ADE 026 GRANT NO. 802269**

**Statistical Concepts for Design Engineers Oklahoma State University Stillwater, OK**

The report describes basic statistical concepts for engineers engaged in test design. Although written in handbook form for use within the Environmental Protection Agency, it is not intended to replace existing statistics textbooks. Its objectives are: to enable design engineers to converse with consulting statisticians, to introduce basic ideas for further individual study, and to enable the reader to make some immediate applications to his own work. EPA CONTACT: Schofield, W. R. 919–549–2745

**650/2–74–082a PE 1AB012 ROAP/TASK 21 ADL 04 CONTRACT NO. 68–02–1316**

**Dynactor Scrubber Evaluation GCA Corporation Bedford, MA**

The report summarizes experimental results from steam contacting of spent catalyst used in petroleum refinery fluid catalytic crakers. This concept has been identified as a potentially effective means of sulfur emission control for fluid catalytic cracker regenerators. Correlations between sulfurremoval efficiency from the catalyst and the product of steam residence time in stripper and steam stripping rate are presented for several stripper designs. The extent of by-product formation, a discussion of pertinent equipment design, and recommendations for the economics are presented as a function of steam stripping rate and fluid catalytic cracker unit size. EPA CONTACT: Harmon, D. L. 919–549–2557

**650/2–74–090 PE 1AB015 ROAP/TASK 21 AFA 004 CONTRACT NO. 68–02–1348**

**Characterization and Control of Asbestos Emissions from Open Sources IIT Research Institute Chicago, IL**

The report reviews control technology applicable to asbestos emissions from open sources including asbestos mines, mills, and manufacturing waste piles. It combined a literature review with visits to asbestos mining and manufacturing operations, and considered climatology, location, and topography. The study, which included preliminary field sampling, produced a comprehensive bibliography on emissions control. The health effects of asbestos exposure were reviewed from two aspects: the significance of fiber size, and the effect of non-occupational exposure. Fiber size considered to be most harmful is still not established and, while non-occupational exposure probably does not lead to asbestosis, evidence relates it to increased incidence of cancer. The U.S. asbestos industry has been reluctant to adopt control technology for its mining and waste dumping operations which is already available for other industries; probable reasons include the relatively small, low profit nature of the industry and the relatively recent recognition of the hazardous nature of asbestos. All eight U.S. mine sites were contacted; three others are no longer operational. Data analyses indicated that asbestos can be detected at considerable distances from a given source. It was concluded that, because of their proximity to populations, asbestos manufacturing waste piles are a threat to public health more serious than asbestos mining. EPA CONTACT: Oestreich, D. K. 919–688–8221

# NEW REPORT ABSTRACTS SECTION

**650/2-74-110 PE 1AB015 ROAP/TASK 21 AXM 061a GRANT NO. 800316**

**Mathematical Simulation of an Adsorber for Pollutant Removal Kansas State University Manhattan, KS**

The first portion of the report: comprehensively surveys the literature on design and operational aspects of processes for adsorbing gaseous pollutants; and summarizes mathematical models of these processes. The second portion of the report: presents mathematical models (based on the mechanism of external mass transfer rate control and a Langmuir type isotherm) for the adiabatic adsorption processes in a fixed bed of adsorbent, taking into account axial dispersion of the pollutant; presents the transient solution (obtained by solving numerically the governing equations using the Crank-Nicolson implicit method) for the dynamic adsorbate concentrations and temperature at various bed positions; and presents results of studies on the effects of various parameters. The third portion of the report: describes a single fixed-bed pollutant adsorber operated cyclically by synchronizing the change in direction of the gaseous flow with the change in temperature; presents two operational schemes for such a system; and discusses effects of several parameters on adsorber performance. EPA CONTACT: Murthy, B. N. 919-688-2547

**650/2-74-114 PE 1AB012 ROAP/TASK 21 ADJ 029 CONTRACT NO. 68-02-1303**

**Conditioning of Fly Ash with Sulfamic Acid, Ammonium Sulfate, and Ammonium Bisulfact Southern Research Institute Birmingham, AL**

The report summarizes recent experience with three agents- sulfamic acid, ammonium sulfate, and ammonium bisulfate-used to regulate the electrical resistivity of fly ash in electric generating stations to ensure satisfactory collection of fly ash in electrostatic precipitators (ESPs). It presents information about the effectiveness of these agents in pilot-and full-scale ESPs. It also presents the limited information available from practical trials of these agents concerning their conditioning mechanisms. It discusses in detail the fundamental physical and chemical properties of the agents that are relevant to fly-ash conditioning. From this information and the results of ESP tests, the report offers tentative conclusions about conditioning mechanisms. Finally, the report briefly discusses the economic aspects of using each of the agents as a conditioning substitute for sulfur trioxide. EPA CONTACT: Sparks, L. E. 919-688-2557

**650/2-74-117 PE 1AB012 ROAP/TASK 21 ADM 021 CONTRACT NO. 68-02-1320**

**Sources and Characterization of Fine Particulate Test Dusts Monsanto Research Corporation Dayton, OH**

The report gives results of an investigation: to select suitable characterization criteria for test dusts; to determine procedures for obtaining, handling, and characterizing the dusts; and to establish potential suppliers of test dusts. Seventeen suitable characterization criteria for test dusts were identified, with techniques for obtaining values for each property defined. Potential industrial suppliers of test dust for simulation purposes were identified for 11 industries. The problem of producing a particulate-laden test flue gas was also evaluated; redispersion of collected dusts was favored over generation of fresh particulate. The establishment of a central coordinating logistics network for the acquisition and characterization of test dusts was recommended. The industries contacted included: pulverized coal combustion, stoker-fired coal combustion, basic furnaces, open hearth furnaces, electric arc furnaces, metallurgical coke ovens, cement plants, municipal incineration, steel foundries, kraft pulp mill recovery furnaces, and asphalt plants. EPA CONTACT: Turner, J. H. 919-688-2557

**650/2-74-118 PE 1AB013 ROAP/TASK 21 AFJ 006 CONTRACT NO. 68-02-1325**

**Symposium Proceedings: Environmental Aspects of Fuel Conversion Technology (May 1974, St. Louis, Missouri) Research Triangle Institute**
Research Triangle Park, NC

This document is the final report covering EPA's symposium held at the Chase-Park Plaza Hotel, St. Louis, Missouri, May 13-15, 1974. The principal objective of the symposium was to review and discuss environmentally related information of coal conversion technology. More specifically, papers were presented that covered environmental quality and standards, fuel contaminants, environmental aspects of specific fuel conversion systems, fuel utilization and total environmental assessment and research and development needs. EPA CONTACT: Rhodes, W. J. 919-688-2851

# NEW REPORT ABSTRACTS SECTION

**650/2-74-120 PE 1AA010 ROAP/TASK 26 AAM CONTRACT NO. 68-02-1229**

**In-Stack Transmissometer Measurement of Particulate Opacity and Mass Concentration Philco-Ford Corporation Newport Beach, CA**

The objectives of the program were to evaluate the light transmission approach to monitoring particulate pollution and to determine the reliability and degree of correlation of the transmissiometer and other particulate measurement methods in a variety of industrial environments. The six industrial environments were as follows: (1) A petroleum refinery catalytic cracking unit catalyst regenerator, (2) Sewage treatment plant incinerator for sludge burning, (3) Asphaltic concrete plant (hot mix), (4/5) Secondary brass and lead smelter, (6) Oil fired power plant. The scope of work required that a commercially available transmissometer be tested at each site for 30 days and its performance evaluated as a continuous monitor of the in-stack opacity, plume opacity and in-stack mass concentration. The mass concentrations were measured directly with the EPA particulate sampling train (Method 5, Federal Registar Vol. 30, No. 247, December 23, 1971). The plume opacity was measured by one of several objective methods such as telephotometry of contrasting targets through the plumes or sun photometry through the plumes. Data were also obtained on the spectral transmission characteristics and size distribution of the particulate emissions of the plants. EPA CONTACT: Conner, W. D. 919-549-2216

**650/2-74-123 PE 1AB013 ROAP/TASK 21 ADE 010 CONTRACT NO. 68-02-1318**

**Boiler Modification Cost Survey for Sulfur Oxides Control by Fuel Substitution Aerotherm/Acurex Corporation Mountain View, CA**

The report gives results of a study to identify capital costs associated with converting industrial and utility boilers from conventional high-sulfur fossil fuels to low-sulfur products from selected coal conversion processes. The boilers of concern include all industrial and utility size equipment in the 10 to the 7th power to 10 to the 10th power Btu/hr capacity range. The substitute fuels include solvent refined coal (SRC) in the solid and hot liquid (melted) phases as well as lower-Btu gas. The cost assessment methods used in the study showed that conversion to liquid SRC is the most expensive alternative. Converting coal-fired boilers to solid SRC is the least expensive alternative for these types of boilers. Between the costs of converting to SRC in either phase lie those costs for converting to the gaseous fuels. A significant result of the study is that the costs of all conversion strategies increase exponentially with boiler capacity: cost appears to be a weak function of boiler design. EPA CONTACT: Chatlynne, C. J. 919-688-2915

**650/2-74-124 PE 1AA010 ROAP/TASK 26 ACX 019 CONTRACT NO. 68-02-1303**

**Development of Sampling Method for Total Atmospheric Selenium Southern Research Institute Birmingham, AL**

The primary purposes of this contract were to develop a collection technique for the quantitative collection of total atmospheric selenium and to characterize the forms in which selenium occurs in the atmosphere. Retentive filters were used to collect particulate material containing selenium; chemically treated filters for the collection of gaseous or vaporous selenium were evaluated. Laboratory generators were setup for the evaluation of filter materials. The 2,3- diaminonaphthalene (DAN) fluorometric method was established as the primary analytical technique to determine selenium. Air particulate samples were analyzed for selenium and procedures were studied for determining relative amounts of selenium present in different oxidation states. Selenium aerosol and vapor generators were set up, characterized and used to evaluate other sampling devices. Selenium appears to be present in ambient air predominantly as or with particulate matter; thus it was tentatively established that conventional particulate sampling suffices to collect the bulk of atmospheric selenium; however, concentrations of elemental selenium could have been underestimated. The most probable chemical forms of atmospheric selenium were determined to be the element and the dioxide (or selenite). EPA CONTACT: Wittgenstein, E. 919-549-2185

**650/2-74-132 PE 1AB012 ROAP/TASK 21 ADJ 026 CONTRACT NO. 10-12-0166**

**Electrostatic Precipitator Performance Model Southern Research Institute Birmingham, AL**

The report gives results of: A review of the design details of a pilot precipitator; and particle concentration profile studies. It also reviews discussions of resistivity measurement and correlations between resistivity and precipitator operation. Objectives of the study covered by the report were: To extend the precipitator model to include factors not included in the first model influencing its accuracy; to design and build a pilot precipitator for further studies of the factors influencing precipitation processes; to review limitations to precipitator performance due to back corona and sparking; to investigate the particle concentration profile in the interelectrode space; to obtain data from both field and pilot plant tests to attempt to verify the computer model; and to analyze potential for optimizing precipitator performance by design or operation modifications. EPA CONTACT: Lorentz, R. C. 919-688-2557

# NEW REPORT ABSTRACTS SECTION

**660/2-75-009 PE 1BB039 ROAP/TASK 21 AYP 13 GRANT NO. 800364**

**Use of Soil Parameters for Describing Pesticide Movement Through Soils BY J. M. Davidson, G. H. Brusewitz, D. R. Baker, and A. L. Wood,** Oklahoma State University Stillwater, OK

Solutions of a differential equation for solute transport are described for both transient and steady state soil water conditions. The solutions use independently measured soil and soil-pesticide adsorption-desorption characteristics to describe the movement of a pesticide in a soil profile. Owing to the complexity of the soil-pesticide adsorption- desorption characteristics, numerical solutions of the soil water flow and solute transport equations were used. Numerical dispersion in the finite difference solution of the solute transport equation was considered and a correction included in the solution. Experimental results from laboratory and field studies were used to test the numerical solutions for their ability to describe the movement and distribution of pesticides in a soil profile with time. Equilibrium adsorption and desorption isotherms were not single-valued relationships in any ofthe soil-herbicide systems studied. Kinetic adsorption-desorption models were evaluated and shown to be inadequate for predicting herbicide mobility at high average pore-water velocities. An empirical model was developed, based on experimental data, and used to describe herbicide movement at high flow rates. The procedure defined a fraction of the soil adsorbing sites that were in equilibrium with the herbicide during displacement. This fraction was a function of the average pore-water velocity. EPA CONTACT: Bailey, G. W.

**660/2-75-010 PE 1BB039 ROAP/TASK 21 BEQ 15 GRANT NO. 803021**

**Research Status of Effects of Land Application of Animal Wastes BY W. L. Powers, G. W. Wallingford, and L. S. Murphy, Kansas State** University Manhattan, KS

The primary purpose of this report was to review the literature and analyze research needs on the effects of land application of animal waste. An additional purpose was to assemble published information on the characteristics of waste, effects of waste on soil and water near applition sites, application rates, application techniques, and research needs. This report is organized into six main topics: (1) climate, waste, and soil classification; (2) waste composition; (3) effect of waste on the environment; (4) application rates based on waste constituents; (5) application techniques; and (6) research needs. The climate, waste, and soil classification systems were developed to allow comparison of the effects of animal waste applications on land in various parts of the country. The composition of the waste in each climate was tabulated and values compared. Comparisons between climatic regions were not possible because the large variability within regions. Because of this variability, no average composition for a given waste in a given climatic region was possible. The effect of the waste on the environment was measured in terms of the possible final disposition of the waste constituents. These constituents could accumulate in the soil, move to the groundwater, runoff the soil surface, or be taken up by plants. Attempts were made to assemble application guidelines from the various parts of the country. EPA CONTACT: Shuyler, L. R.

**660/2-75-011 PE 1BB036 ROAP/TASK 21 AZP 44 CONTRACT NO. 68-03-2136**

**Process and Environmental Technology for Producing SNG and Liquid Fuels BY M. R. Beychok, Beychok, Milton R., Consulting Engineer Irvine,** CA

This report presents the process technology and environmental factors involved in the emerging industries for providing new supplemental energy supplies from non-conventional sources. It includes: (1) the production of substitute natural gas (SNG) from coal, crude oil and naphtha, (2) importing overseas gas supplies in the form of liguefied natural gas (LNG) and as liguid methanol, (3) the regasification of LNG, (4) the production of liguid fuels from oil shale, and (5) the liguefaction of coal to produce clean fuels. The report also includes introductory chapters to familiarize the reader with the technology of oil and gas processing, heat balances, fuel combustion and stack gases, thermal efficiences, and water balances. EPA CONTACT: Pfeffer, F.

**660/2-75-013 PE 1BB039 ROAP/TASK 21 BEQ 11 GRANT NO. 800923**

**Treatment and Ultimate Disposal of Cattle Feedlot Wastes BY H. L. Manges, R. I. Lipper, L. S. Murphy, W. L. Powers, and L. A. Schmid, Kansas** State University Manhattan, KS

A study was conducted to determine the characteristics of beef feedlot wastes, both runoff and manure, and the optimum application rate of these wastes to land. The project was located at a commercial beef feedlot in southcentral Kansas. Characteristics of beef feedlot wastes varied widely with season. Near maximum corn forage yields, without excessive accumulation of salt in the soil, were obtained from waste application rates necessary to meet nitrogen fertilizer recommendations. At these waste application rates, basic intake rate of water into the soil was increased. Net income from irrigated corn production was sufficient to make application of feedlot manure with disposal as the main objective unprofitable. Land application rates of beef feedlot wastes should be based upon the results of laboratory analyses of wastes from each feedlot. Feedlot wastes should be applied at rates necessary to meet nitrogen fertilizer recommendations. A salt-alkali test should be made annually on the surface soil to monitor changes in soil salinity levels. EPA CONTACT: Shuyler, L.

# NEW REPORT ABSTRACTS SECTION

**660/3–74–031 PE 1BA022 GRANT NO. 18080 FBW**

**Environmental Requirements of Selected Estuarine Ciliated Protozoa BY A. C. Borror, New Hampshire, University of Durham, NH**

Measurements of temperature, pH, oxygen concetration, H2S concentration, salinity, bacterial concentration, occurrence of micrometazoa, and distribution and abundance of ciliated protozoa were recorded during the summers of 1970 and 1971 in a tidal marsh at Adams Pt., Durham, New Hampshire. Numerous differences in ciliate distribution occurred between the upper (Spartina patens) marsh and the lower (Spartina alterniflora) marsh. Physical and biological parameters of a patens-panne pond were measured during a 2-week period involving the initial flushing of the pool by a session of full moon spring tides. Effects of a full moon spring this cycle, a neap tide cycle, and a new moon spring tide cycle for one station in the lower marsh were evaluated. During 1970 and 1971, 103 species of ciliates, representing 41 families and 10 orders were identified, including 4 new species. Several instances of correlations between ciliate abundance and oxygen concentration, H2S concentration, and salinity were observed. Contribution of tidal marsh ciliates in general to estuarine food webs probably occurs through their association with particulate detritus. EPA CONTACT: Malcolm, M. 410–847–8175

**660/3–75–016 PE 1BA022 ROAP/TASK 16 AAR 13 CONTRACT NO. 68–01–0190**

**Toxicity of Selected Pesticides to the Bay Mussel (Mytilus edulis) BY D. H. Liu, and J. M. Lee, Stanford Research Institute Menlo Park, CA**

The toxicity of the insecticides Sevin, methoxychlor, and malathion and of the herbicides Treflan and 2,4-D to the bay mussel (Mytilus edulis) was investigated. Toxic effects were measured in terms of survival of and byssus-thread attachment by adults, embryo shell development, and larval growth and metamorphosis. The results indicated that growth was the most sensitive measure of toxicity. All the pesticides produced statistically significant ($p = 0.05$) reductions in larval shell length after 10 to 20 days of exposure. Relative to potency, methoxychlor was the most toxic, and 2,4-D was the least toxic. The 96-hour TL50 values for each pesticide, based on adult survival and attachment data, were estimated, as were the 48-hour EC50 values based on data from embryo bioassays. The effects on embryo evelopment of delaying the time of fertilization and of using seawater larval culture media of various ages also were studied, and substrate preference by metamorphosing larvae was investigated. A critical evaluation of the experimental approach and procedures is presented. EPA CONTACT: Hegre, C. S.

**660/3–75–017 PE 1BA021 ROAP/TASK 16 ABI 05 GRANT NO. 800704**

**Temperature Effects on Eggs and Fry of Percoid Fishes BY L. L. Smith Jr., and W. M. Koenst, Minnesota, University of St. Paul, MN**

Temperature effects on the early life history stages of the walleye (Stizostedion vitreum vitreum (Mitchill)) and sauger (Stizostedion canadense (Smith)) were examined. Walleye eggs and fry were exposed to six temperatures (6-21°C) for effects on fertilization, incubation, and fry survival. Mature sauger were held and eggs were fertilized at four temperatures (9-18°C). Both species were incubated at 6-21°C. Sauger fry survival was also testedat 6-21°C. Optimum fertilization temperatures were 6-12°C for walleye and 9-15°C for sauger. Optimum incubation temperatures were 12-15°C for both walleye and sauger. A sharp drop or rise in temperature had no great effect on walleye fry and juvenile survival except when the upper lethal or lower lethal temperature was approached. Optimum temperature for juvenile walleye and sauger growth was 22°C. Upper lethal temperatures for walleye juveniles were determined for acclimation temperatures at 2°C intervals between 8-26°C. The upper lethal temperature of walleye juveniles was 27.0-31.6°C, depending on acclimation. The upper lethal temperature of sauger acclimated to 10-26°C was 26.6-30.4°C. There was little temperature difference (1-2°C) between 100 % survival and no survival. EPA CONTACT: Hokanson, K. E.

**660/3–75–018 PE 1BA024 ROAP/TASK 21 AIO 05 CONTRACT NO. 68–03–0298**

**Ground-Water Pollution Problems in the Northwestern United States BY F. Van der Leeden, L. A. Cerrillo, and D. W. Miller, Geraghty and** Miller, Inc. Port Washington, NY

An evaluation of ground-water pollution problems has been carried out in six states in the northwest: Colorado, Idaho, Montana, Oregon, Washington and Wyoming. The findings of the investigation indicate that, with the exception of radioactive waste disposal, few cases of ground-water pollution have been investigated in detail. There is a need for baseline water- quality data and systematic evaluation of overall ground-water conditions, especially in urban zones, in areas of petroleum exploration and development, and at locations of mining and industrial activity. The most common natural ground-water quality problems, other than high salinity, are excessive hardness, iron, manganese, and fluoride. Principal sources of man-caused ground dnd-water quality problems in the approximate order of severity are: discharge of effluent from septic tanks and sewage treatment plants, irrigation return flow, dryland farming, abandoned oil wells, shallow disposal wells, unlined surface impoundments, mine tailings and mine drainage, municipal and industrial landfills, and radioactive waste disposal. Other sources that appear to be of less importance but still must be considered include: spills and leaks, application of fertilizers and pesticides, feedlots, and salt-water intrusion. EPA CONTACT: Scalf, M. R.

# NEW REPORT ABSTRACTS SECTION

**660/3–75–019 PE 1BA021 IN-HOUSE PROJECT**

**Chena River—A Study of a Subarctic Stream BY P. J. Frey, E. W. Mueller, and E. C. Berry, Arctic Environmental Research Laboratory, EPA College, AK**

The Chena River is a subarctic stream flowing westerly from the low mountains of eastern Alaska to the Tanana River near Fairbanks. It is typical of many interior Alaska rivers with the exception that its lower reaches are highly polluted by domestic and industrial wastes from the Fairbanks area. The purpose of this 3-year study of the river was to understand the physical, chemical and biological limnology of the river system and what effect man's influence --past, present and future--has on the river. Dissolved oxygen was one of the most critical parameters determined. In the summer it is close to saturation. During winter, in the lower river, the concentration approaches 1 mg/1. The biological community was studied through both quantitative and qualitative plant and animal collections. The upper reaches of the river are much richer in kinds of organisms than the lower reaches. Coliform bacteria counts range from very low in the upper river to over 500,000 per 100/m1 below Fairbanks. A flood control dam is planned for the river above the city of Fairbanks. Significant modification of the water quality and biota of the river can be expected following the construction of the dam. Proper management of the flow from the impoundment can reduce the objectional effects of this dam on the river system. EPA CONTACT: McClintock, C.

**660/3–75–020 PE 1BA021 IN-HOUSE PROJECT**

**Effects of Forest Fires on Water Quality in Interior Alaska BY F. B. Lotspeich, E. W. Mueller, and P. J. Frey, Arctic Environmental Research** Laboratory, EPA College, AK

Large and frequent fires are not new to the Taiga of Alaska, nor is Alaska unique among northern regions in this respect. Interior Alaska was very dry in the summer of 1966 and thunderstorms were frequent. The fire, on which this report is based, was caused by lightning on July 23, 1966, and burned into September covering a total of over 1/4 million acres. About 2 months after termination of the fire, representatives of the Bureau of Land Management contacted scientists at the Alaska Water Laboratory (now AERL) for assistance in evaluating some effects of this large fire. After exploring several means of assistance, it was agreed that AWL would conduct a research study in cooperation with BLM. The objectives of this study were: to develop sufficient understanding of the effects of forest fires on water quality of Alaskan streams so that it may be possible to make rational decisions for allocating manpower and funds for controlling specific fires and; to develop an understanding of needs for rehabilitation (revegetation, erosion prevention, etc.) to control immediate and future pollution effects of the fire on the aquatic environment. EPA CONTACT: McClintock, C.

**660/3–75–022 PE 1BA026 ROAP/TASK 21 AKP 14 GRANT NO. 800608**

**Chlorinated Hydrocarbons in the Lake Ontario Ecosystem (IFYGL) BY C. L. Haile, G. D. Veith, G. F. Lee, and W. C. Boyle, Wisconsin, University** of Madison, WI

Lake Ontario fish, water, sediment, net plankton, Cladophora, and benthos were examined for DDT group pesticides, dieldrin, and PCBs. Endrin, BHC group pesticides, and heptachlor were also identified in some fish samples. DDE levels were generally similar to t-DDT levels, except for sediments where DDD and DDT contributed significantly to t-DDT values. PCB/t-DDT ratios averaged 2.6 for all samples except for sediment (7.0) and benthos (5.3). EPA CONTACT: Mullin, M.

**660/3–75–024 PE 1EA077 ROAP/TASK 10 AKC 33 CONTRACT NO. 68–03–0238**

**Effect of Mirex and Carbofuran on Estuarine Microorganisms BY L. R. Brown, E. G. Alley, and D. W. Cook, Mississippi State University Jackson,** MS

The purpose of this investigation was to help establish the chemical, physical and micro-biological fate of mirex and carbofuran in the estuarine environment and determine the effect(s) on important estuarine microorganisms and their activities. Chemical studies on the adsorption, fate and hydrolysis were conducted. The micro-biological studies involved the use of both pure cultures and mixed cultures in a microcosm system and included twelve distinct physiological groups of microogranisms. It was concluded that neither mirex nor carbofuran would have a deleterious effect on estuarine bacteria under normal conditions, and there was no evidence of bioaccumulation. Degradation products of both compounds were shown to be toxic to some microorganisms. EPA CONTACT: Bourquin, A. W.

**670/2–74–025 PE 1BB043 ROAP/TASK 21 AAT 05.6 CONTRACT NO. 14–12–0820**

**Effect of Carbon to Nitrogen Ratio on Activated Sludge Subsidence and Dewatering Characteristics BY A. Geinapolos, Envirex, Inc.** Milwaukee, WI

Two activated sludge systems were operated with nitrogen deficient paper and pulp mill wastes. Control of the organic carbon to ammonia nitrogen ratio was applied to study the resulting characteristics of the waste activated sludge. Pilot scale air flotation and vacuum filtration tests were conducted. A sludge that resulted from a waste with a carbon to nitrogen ratio of 15:1 was found to have the best dewatering characteristics. EPA CONTACT: Barth, E. F. 513–684–8240

# NEW REPORT ABSTRACTS SECTION

**670/2–74–073 PE 1BB041 ROAP/TASK 21 AVR 003 GRANT NO. 801830**

**Evaluation of MTF for Testing Hazardous Material Spill Control Equipment BY C. R. Thomas, G. M. L. Robinson, and E. J. Martin, Hancock** Company Bay St. Louis, MS

The Mississippi Test Facility (MTF), Bay St. Louis, Mississippi, is evaluated as a potential location for safely testing and demonstrating equipment designed to control hazardous materials spills. The study includes an examination of all factors, which influence the selection of an appropriate site, with special emphasis on the assured protection of the environment. Within the identified constraints, three candidate areas were selected for more detailed investigation: the Northeastern Buffer Zone, the Southeastern Buffer Zone, and the North-Central Fee Area. The report recommends the use of a 100-acre site located in the Northeastern Buffer Zone to conduct a three-phase development program. The program includes detailed initial and continuing environmental baseline monitoring, construction and operation of a semi-recommended test facility includes the following: an artificial stream channel, test ponds, landspill study areas, and supporting elements. It is recommended that the three-part program development phase be initiated within the near future, in order to meet the rapidly increasing needs for such a facility. EPA CONTACT: Lederman, P. B. 201–548–3402

**670/2–74–086 PE 1BB034 ROAP/TASK 21 ATB 036 CONTRACT NO. 68–03–0154**

**Chemical Impact of Snow Dumping Practices BY P. J. O'Brien, P. L. Levins, and C. H. Summers, Arthur D. Little, Inc. Cambridge, MA**

This report contains the results of a study conducted for the U.S. Environmental Protection Agency to evaluate the chemical effects of the dumping of snow collected from the municipal streets into watercourses or waterbodies in three selected areas: a large river (Mohawk at Schenectady, N.Y.), a smaller river (Concord at Lowell, Mass.), and a small pond (Horn at Woburn, Mass.). Unusually low snowfall during the winters of 1972-73 and 1973-74 together with a nationwide gasoline shortage (which limited or curtailed snow dumping operations) resulted in insufficient data. EPA CONTACT: Master, H. E. 201–548–3541

**670/2–75–006 PE 1BB040 ROAP/TASK 21 BDT 06 GRANT NO. 801236**

**Removal of Manganese From Mine Drainage by Ozone and Chlorine BY R. Rozelle, and H. Swain, Wilkes College Wilkes Barre, PA**

This research was directed toward an examination of methods by which coal mine water could be treated for removal of manganese. The objectives were to reduce manganese concentrations to at least 1 mg/1 and preferably less than 0.05 mg/1. In order to remove manganese from mine water, strong oxidizers must be employed to oxidize it to the (+4) oxidation state in which it is relatively insoluable and will precipitate as $MnO_2$. Both ozone and hypochlorite ion were effective in this oxidation and reduced manganese concentrations to less than 1 mg/1 and in some cases to less than 0.05 mg/1. Reaction orders based on initial reaction rates are reported for the manganese (II) at pH values of 2, 4, 6, and 7.9 in the time intervals studied. Solubilities of both manganese (II) hydroxide and manganese (IV) oxide were measured. Cost data were developed for both the ozone and sodium hypochlorite treatment. EPA CONTACT: Hill, R. D. 513–584–4410

**670/2–75–011 PE 1BB034 ROAP/TASK 21 ASY 107 CONTRACT NO. 68–03–0272**

**Physical and Setling Characteristics of Particulates in Storm and Sanitary Wastewaters BY R. J. Dalrymple, S. L. Hodd, and D. C. Morin,** American Public Works Association Chicago, IL

An investigation was conducted, as part of model studies utilizing a swirl concentrator as a primary separator, helical combined sewer overflow regulator, and related studies, to characterize the properties of solids in sanitary sewage, combined sewer overflows, and stormwater runoff. To effectuate this study, material suitable for monitoring removal efficiencies in hydraulic models of the swirl concentrator unit has been developed. The approach taken by Beak Consultants, Ltd., serving as a subcontractor to the American Public Works Association in the simulation sewage studies, was to match as closely as possible the settling characteristics of solids in three types of sewage and/or urban runoff with a well-defined, uniform artificial test material. An Amberlite Anion Exchange Resin (IRA-93), when ground and sieved to between 74 and 149 microns, was found to closely simulate the settling characteristics of domestic sewage. This material is of uniform density and appears to react according to Stokes' law for spherical particles at this size range. Arizona Road Dust, between 10 and 20 microns, was found to exhibit a similar settling velocity distribution to that of the colloidal(or semi-colloidal) components of sanitary sewage flow. Importantly, as background information for the selection of synthesized solids, the settling characteristics (including size and specific gravity distribution) of sanitary sewage, combined sewer overflow and stormwater were determined. These values will be useful for future determinations of physical treatment process design and associated treatability. EPA CONTACT: Field, R. 201–548–3503

# NEW REPORT ABSTRACTS SECTION

**670/2–75–015 PE 1BB036 ROAP/TASK 21 AZO 21 GRANT NO. 802637**

**Pilot Plant Optimization of Phosphoric Acid Recovery Process BY L. E. Lancy, F. A. Steward, and J. H. West, Lancy Laboratories Zelienople, PA**

A pilot study was carried out which demonstrated the effectiveness and economic feasibility of a unique ion exchange process referred to as "acid retardation" for purifying spent phosphoric acid used in bright finishing aluminum parts. A continuous ion exchange system was employed to separate the aluminum contamination from a spent phosphoric acid waste obtained from a manufacturing plant. The anion resin accomplishes the separation by retarding the phosphoric acid as the processing solution flows through the bed. The aluminum remains in the waste solution and passes out of the column in the effluent. The acid is then eluted from the bed with water, eliminating the use of chemicals which are needed to regenerate the resin in conventional ion exchange systems. EPA CONTACT: Ciancia, J. 201–548–3410

**670/2–75–016 PE 1BB036 ROAP/TASK 21 AZQ 07 GRANT NO. 801349**

**Reclamation of Sulfuric Acid From Waste Streams BY H. C. Peterson, and P. L. Kern, New Jersey Zinc Company Palmerton, PA**

The New Jersey Zinc Company process for acid recovery employs spray evaporation to separate sulfuric acid from metallic sulfates. The salts are removed as dry, free-flowing solids and the acid- laden off-gas is directly cooled to partially condense product acid having a concentration in excess of 85% $H_2SO_4$. The process was piloted at Palmerton, Pennsylvania, at a rate of two tons per day of sulfuric acid (100% basis) using as feed the waste On the basis of the pilot work, a commercial plant was designed to process 345,000 metric tons annually of 19.5% $H_2SO_4$ waste end liquor from a 38,100-metric-ton-per-year pigment plant. The estimated investment (as of January 1, 1975) is approximately $77 per metric ton of 100% $H_2SO_4$ recovered. This cost includes neutralization of the dried solids and disposal in a landfill site. EPA CONTACT: Skovronek, H. S. 201–548–3411

**670/2–75–018 PE 1BB036 ROAP/TASK 21 AZO 11 GRANT NO. 12010 FXD**

**Reclamation of Metal Values from Metal-Finishing Waste Treatment Sludges BY A. B. Tripler Jr., R. H. Cherry Jr., and Jr., G. R Smithson, Battelle Columbus Laboratories Columbus, OH**

The efforts of this program have included the determination of the worth of recovering metal values from metal-finishers' wastewater treatment sludges, the definition and research of processes for such recovery, and the selection, design, and costing of a recommended process. The study included a survey of the literature to determine the state-of-the-art regarding the generation, disposal, and recovery treatment practices relevant to metal-finishers' sludges, and to identify metal recovery processes possibly applicable to those sludges. This information was supplemented with a survey by questionnaire to determine the current status of relevant practices and conditions. Field investigations provided detailed examples of plant practices, sludge storage conditions, and sludge characteristics. The extraction of metal values from waste sludges by various leaching agents, and the recovery of metal values by techniques including electrowinning, cementation, and liquid- liquid ion exchange were studied. A portable pilot process for the treatment of waste sludges and recovery of metal values was selected and equipment and operating costs developed. EPA CONTACT: Harris, E. F. 513–684–4417

**670/2–75–019 PE 1BB034 ROAP/TASK 21 ASY 139 GRANT NO. 11023 EKC**

**Biological Treatment of Combined Sewer Overflow at Kenosha, Wisconsin BY R. W. Agnew, C. A. Hansen, W. H. Richardson, M. J. Clark, and O. F. Nelson, Kenosha, City of Kenosha, WI**

This report describes the design, construction, operation and two- year evaluation of a biological process used for the treatment of potential combined sewer overflow. A 75,700 cu m/day (20 mgd) modified contact stabilization process was constructed on the grounds of an existing 87,055 cu m/day (23 mgd) conventional activated sludge plant at a total cost of 1.1 million dollars. The demonstration system consisted of pumping facilities, the conversion of an unused flocculation basin into a grit basin, construction of a contact tank and stabilization tank, installation of a final clarifier and all associated yard piping and automatic control equipment. The demonstration system's raw sewage pump and clarifier were used by the dry weather plant when the demonstration system was not in use. Results from the evaluation program proved the demonstration system to be a feasible concept for the treatment of potential combined sewer overflow. The system was operated and evaluated during 49 runs in which 681,300 cu m (180,000,000 gal.) of potential overflow was treated. Based on these tests, expected removal efficiencies for suspended solids, BOD, and TOC are 90%, 85%, and 76%, respectively. Operating costs for running the system 300 hours per year are estimated at 3.567¢/cu m (13.5¢/1000 gal.). An additional benefit derived from the demonstration system was improved removal efficiencies by the dry weather plant through utilisation of the demonstration system facilities. EPA CONTACT: Field, R. 201–548–3503

**670/2–75–020 PE 1BB034 ROAP/TASK 21 ASY 46 GRANT NO. 11020 FAX**

**Sewerage System Monitoring and Remote Control BY T. R. Watt, R. G. Skrentner, and A. C. Davanzo, Detroit Metro Water Department Detroit, MI**

This publication is the final report of a demonstration project to apply sewer system monitoring and remote control techniques to reduce pollution of receiving waters from combined sewer overflows and storm wastewater pumping. The monitoring system includes telemetering rain gages, sewer level sensors and overflow sensors and a central computer and data logging facility. Wastewater pump stations and certain key regulators were remotely controlled to allow in-system storage. Remotely controlled sluice gates were installed in a sewer to study the feasibility of using dry weather flow to flush sewers. The report includes a detailed discussion and evaluation of the monitoring and remote control equipment, installation details, the concept of in-system storage, and the operation of the system based onan 18-month study period. Detroit has found that many of the larger sewers are not used to capacity during storms. Utilization of system monitoring and remote control techniques has resulted in a significant reduction in the volume of combined sewer overflows and storm wastewater pumping as well as reduced operation and maintenance costs. Results of a combined sewer sampling program are being used to establish priorities for future system modifications. EPA CONTACT: Casareo, D. A. 201–548–3546

# NEW REPORT ABSTRACTS SECTION

**670/2–75–021 PE 1BB034 ROAP/TASK 21 ASY 124 GRANT NO. 802400**

**Bench-Scale High-Rate Disinfection of Combined Sewer Overflows With Chlorine and Chlorine Dioxide BY P. E. Moffa, Jr., E. C Tifft, S. L. Richardson, and J. E. Smith, Syracuse University** Syracuse, NY EPA CONTACT: Field, R. 201–548–3503

**670/2–75–022 PE 1BB034 ROAP/TASK 21 ATA 15 GRANT NO. 802219**

**Urban Stormwater Management Modeling and Decision-Making BY J. P. Heaney, W. C. Huber, H. Sheikh, M. A. Medina, J. R. Doyle, W. A. Peltz, and J. E. Darling, Florida, University of** Gainesville, FL

The purposes of this study were to test, refine and augment the capabilities of the EPA Storm Water Management Model (SWMM), and to develop decision-making capabilities for use in the study of urban stormwater runoff problems. With regard to the SWMM the numerous programming refinements were introduced to provide greater reliability and flexibility. A sediment prediction capability has been incorporated directly into the SWMM. Detailed testing was conducted in Lancaster, Pennsylvania, to demonstrate the ability of the SWMM to describe the relatively complex phenomena occurring in an urban catchment. A systematic procedure is presented for examining the stormwater management problem in the broader context of urban water resources management. Related standards for flood control and drainage, street and parking lot design, etc., are reviewed and suggestions presented regarding modifications in practices which would ameliorate stormwater problems. An optimization procedure is described which addresses the related problems of finding efficient and equitable control strategies. Lastly, the use of the SWMM for preliminary hydraulic design of sewer systems is described. EPA CONTACT: Field, R. 201–548–3503

**670/2–75–023 PE 1DB064 ROAP/TASK 24 ALU 03 CONTRACT NO. 68–03–0128**

**Evaluation of Health Hazards Associated With Solid Waste Sewage Sludge Mixtures BY W. L. Gaby, East Tennessee State University Johnson City, TN**

This report summarizes and evaluates the health hazards associated with municipal solid waste/sewage composting by the windrow composting process. The occurrence and survival of pathogens, parasites, and indicator bacteria at various stages during the composting process are described. The study shows that windrow temperatures of 120°F to 167°F (49°C-74°C) maintained for at least 7 days destroy pathogens and human parasites. Dog parasitic ova, however, remain intact 35 days after exposure. Considerable variation in the temperature is found at the top and bottom 2 inches of the windrow indicating that proper turning of the compost is essential to ensure destruction of pathogens and parasites. It is concluded that a properly composted solid waste or solid waste/ sewage sludge mixture is microbiologically acceptable as a soil conditioner for gardens, farms, and lawns, or for filling areas of erosion without creating health hazards. EPA CONTACT: Clemons, C. A. 513–684–4481

**670/2–75–033a PE 1DB064 ROAP/TASK 24 ALH 08 GRANT NO. 800432**

**Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. I – Summary BY N. L. Hecht, and D. S. Duvall, Dayton Research Institute, University of Dayton, OH**

The nature and disposal practices for municipal and utility sludges and ashes were studied. The study was primarily concerned with sludges from municipal waste water, and water treatment plants, coal ash from power stations and grate residue from municipal incinerators. Each of these subject areas is presented in a separate report. Volume I of this series presents the summary for the results and conclusions developed for each of the subject areas. EPA CONTACT: Carnes, R. A. 513–684–4487

**670/2–75–033b PE 1DB064 ROAP/TASK 24 ALH 08 GRANT NO. 800432**

**Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. II – Municipal Sludges BY N. L. Hecht, and D. S. Duvall, Dayton Research Institute, University of Dayton, OH**

A comprehensive characterization and evaluation was performed of disposal and utilization practices for sludges from municipal wastewater and water treatment plants. The nature and quantities of the sludges were discussed. Various sludge handling and treatment techniques were detailed. Problems encountered in sludge disposal were reviewed, and the economics of wastewater sludge disposal were discussed. EPA CONTACT: Carnes, R. A. 513–684–4487

**670/2–75–033c PE 1DB064 ROAP/TASK 24 ALH 08 GRANT NO. 800432**

**Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. III – Utility Coal Ash BY N. L. Hecht, and D. S. Duvall, Dayton Research Institute, University of Dayton, OH**

The residue from the burning coal, collected from the stack effluent and the bottom of the boiler unit, is another solid waste disposal product that the community must be concerned with. Since 1940 more than 300 million tons of this coal ash has been generated, of which only about 30% has been utilized. In this study the nature of coal ash has been defined, the quantities produced have been determined and the locations of the major utilities generating the coal ash have been established. In addition, the anticipated compositional changes and quantities to be generated in the future resulting from expanded energy requirements, advancements in technology and pollution controls have been evaluated. This study also included a review of current disposal and utilization practices. EPA CONTACT: Carnes, R. A. 513–684–4487

# NEW REPORT ABSTRACTS SECTION

**670/2-75-033d PE 1DB064 ROAP/TASK 24 ALH 08 GRANT NO. 800432**

**Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. IV – Municipal Incinerator Residues BY N. L. Hecht, and D. S. Duvall, Dayton Research Institute, University of** Dayton, OH

The composition and current disposal practices for the residue resulting from the incineration of urban refuse have been studied. In addition, the characteristics of urban refuse are described, and the location and capacity of the nation's municipal incinerators specified. The economic and technical potential for utilizing materials recovered from the residue have also been studied. EPA CONTACT: Carnes, R. A. 513-684-4487

**670/2-75-034 PE 1DB314 ROAP/TASK 06 AKO 02 GRANT NO. 801622**

**Specifications for Materials Recovered from Municipal Refuse BY H. Alter, and W. R. Reeves, National Center for Resource Recovery, Inc. Washington, DC**

Specifications presented in this report represent first efforts to define uniform qualities of materials separated from municipal solid waste in resource recovery processing plants for subsequent sale and use. The establishment of specifications adds value to outputs and promotes acceptance by users as a result of providing a basis for quality assurance. Recoverable materials investigated in this study are: folded newsprint and corrugated paper, ferrous metals, aluminum, other nonferrous metals, glass cullet, inorganic fines, mixed organics (for fuel). Indications of possible contamination were obtained on a limited scale by reviewing literature, visiting plants, and coordinating with the activities of a companion research grant which included processing pilot quantities of municipal solid waste from several cities. The resulting target specifications were written as goals for plant design; the targets seem achievable with existing technology. The likelihood of these target specifications being accepted was checked by reviewing them with officials of appropriate companies and trade associations. EPA CONTACT: Wiles, C.C. 513-684-4484

**670/2-75-036 PE 1CB047 ROAP/TASK 21 AQF 04 IN-HOUSE PROJECT**

**Survey of Corrosion Products in the Seattle Water Department Tolt Distribution BY R. A. Dangel, Water Supply Research Laboratory, EPA Cincinnati, OH**

Samples from the Seattle Water Department's Tolt distribution system were analyzed for chemical and bacteriological parameters. Changes from the raw water quality were observed, particularly in trace metal concentrations and other parameters related to corrosion by cement and bituminous linings whereas service lines and household plumbing were actively corroded. EPA CONTACT: Symons, J. M. 513-684-8305

**670/2-75-037 PE 1BB043 ROAP/TASK 21 ASR 07 GRANT NO. WPRD 16-01**

**Demonstration of a High-Rate Activated Sludge System BY C. H. Huang, and D. L. Feuerstein, Engineering Science, Inc. Berkeley, CA BY E. L. Miller, City of Chino Chino, CA**

A high-rate activated sludge system was designed, constructed and operated at the City of Chino as a biological treatment system utilizing the maximum growth-rate potential of activated sludge as a means of removing organic, and possibly inorganic, materials from domestic wastewater. Operating results indicate that full- scale systems can be operated at high growth rates and high substrate loading rates with concomitant high substrate removal velocities and high quality effluent. Substrate loading rates as high as 3.6 (mg BOD)/(mg MLVSS)(day) and effluent BOD as low as 5 mg/l were achieved. Four solids separation systems--ibratory screens, enhanced gravity separation, dissolved air flotation and hydro-centrifugal cleaned screens--were tested for activated sludge solids separation. Vibratory screens were not effective for separation of high-rate activated sludge solids under the operating conditions employed during this study. Enhanced gravity separators, however, were effective for separation of high-rate activated sludge solids, but only at very low operating overflow rates. EPA CONTACT: Stern, G. 513-684-8276

**670/2-75-038 PE 1BB043 ROAP/TASK 21 ASB 11 CONTRACT NO. 68-03-0148**

**Demonstrated Technology and Research Needs for Reuse of Municipal Wastewater BY C. J. Schmidt, and E. V. Clements III, SCS Engineers Long Beach, CA**

This survey identified 358 sites at which direct reuse of municipal wastewater was being practiced. Detailed data were gathered on volume, effluent quality, treatment, reliability and economics. It was found that direct reuse of municipal wastewater was not widespread accounting for less than 2 percent of this nation's water use in 1972. Irrigation and industrial cooling account for virtually all of this reuse. Only three sites practice reuse for recreational lakes, and one for nonpotable domestic use. Potable reuse is not presently practiced. General quality standards could not be derived for any category. In fact, water which is substandard according to published criteria is being successfully used in many reuse situations by fitting the water quality to the specific local condition. Overall economic analysis was also difficult. Storage and distance between supplier and consumer were more important considerations than quality and treatment. In general, the supplier undercharged the consumer because reuse was viewed as an inexpensive disposal technique. There is significant potential for an increase in reuse of wastewater in all categories; increased publicity concerning successful reuse is required to initiate this increase. EPA CONTACT: Kugelman, I. J. 513-684-8357

# NEW REPORT ABSTRACTS SECTION

**670/2-75-039 PE 1BB043 ROAP/TASK 21 ASC 07 GRANT NO. 800356**

**Advanced Automatic Control Strategies for the Activated Sludge Treatment Process BY J. F. Petersack, and R. G. Smith, Systems Control, Inc. Palo Alto, CA**

Results of a demonstration of the feasibility and benefits of applying several advanced wastewater treatment control strategies in an operational treatment plant using a digital computer are presented in this report. The work was conducted in a full size (35 MGD capacity) secondary treatment plant at Palo Alto, California. Control strategies tested were for the secondary treatment portion of the process and involved regulation of aeration tank dissolved oxygen (DO) and food for microagrenism ratio (F/M). Two variations of F/M ration control were evaluated using respectively air flow and a direct measurement of sludge respiration with an on- line respirometer to estimate food (BOD). An extensive data collection program was incorporated which allowed detailed statistical evaluation of each control algorithm with regard to performance, effluent quality impact, operating costs, and reliability, comparison was made to similar data collected during benchmark manual operation tests. Overall results indicate digital control using advanced control concepts is feasible and that demonstrable improvements in effluent quality are obtained. Direct operating cost savings in the form of an 11% reduction in air use was also shown for DO control. EPA CONTACT: Roesler, J. F. 513-684-8331

**670/2-75-041 PE 1BB034 ROAP/TASK 21 ATA 20 GRANT NO. 802716**

**Storm Water Management Model: Dissemination and User Assistance BY J. A. Hagarman, and F. R. Dressler, University City Science Center Philadelphia, PA**

A program of dissemination and user-assistance for the EPA Storm Water Management Model (SWMM) has been developed and implemented at the University City Science Center (UCSC). Services available to SWMM program itself and technical assistance in problem delineation, data preparation, execution debug, and output interpretation. Costs of this service extend only to actual computing costs, with all technical assistance covered by the EPA grant. Several case studies of SWMM applications completed with UCSC assistance in the past year are included in this report. These studies include a combined sewer overflow problem in Binghamton, New York; a land use plan in the Stony Brook basin in Princeton, New Jersey, and RUNOFF/TRANSPORT calculations on the Wingohocking basin in Philadelphia, Pennsylvania. The UCSC SWMM dissemination program is now self-sustaining and continues to assist the user community. EPA CONTACT: Fan, C. Y. 201-548-3519

**670/2-75-043 PE 1BB036 ROAP/TASK 21 BET 11 GRANT NO. 801872**

**Disposal and Utilization of Waste Kiln Dust From Cement Industry BY T. A. Davis, and D. B. Hooks, Southern Research Institute Birmingham, AL**

A survey that included 60% of the cement-manufacturing plants in the United States was made to determine the fate of dust collected from the gases eminating from cement kilns. Because of high alkali content, large quantities of the dust cannot be returned to the cement making process. A survey was made of the literature in the United States and Europe pertaining to handling, reclaiming, and utilizing the collected dust. Abstracts of 71 references are included in the Appendix. Acid neutralization capacity and potash content make the dust valuable for application to farmland, and the potential market for agricultural use alone could consume all of the waste dust that is now being discharged. EPA CONTACT: Wilson, D. 513-684-4248

**670/2-75-044 PE 1BB041 ROAP/TASK 21 BEA 08 GRANT NO. 803063**

**Oil Spill and Oil Pollution Reports – November 1974 – February 1975 BY F. A. DeWitt Jr., and P. Melvin, California, University of Santa Barbara, CA**

The November 1974 - February 1975 Oil Spill and Oil Pollution Reports is the second quarterly compilation of oil spill events and oil pollution report summaries. Presented in the report are: (a) summaries of oil spill events; (b) summaries and bibliographic literature citations; (c) summaries of current research projects; and (d) patent summaries. EPA CONTACT: Dorrler, J. S. 201-548-3508

**670/2-75-053 PE 1DB064 ROAP/TASK 24 AIR 19 GRANT NO. EP-00329**

**Use of Domestic Waste Glass for Urban Paving – Summary Report BY W. R. Malisch, D. E. Day, and B. G. Wixon, Missouri, University of Rolla, MO**

This report summarizes research on the use of waste glass as an aggregate in asphaltic paving mixtures. Reusing waste glass in this manner would provide an outlet for large quantities of the glass and would permit recycling in urban areas where large accumulations of glass are found. Field tests as well as observations of pavement performance have indicated that field installations of asphaltic paving mixtures containing glass have generally maintained adequate skid resistance and performed acceptably from a structural standpoint. The economic feasibility of using waste glass as an aggregate in asphaltic concrete depends primarily on developing resource recovery systems that can separate glass along with other recyclable components and generate enough revenues from their sale, plus disposal and processing fees, to produce an acceptable return on equity. EPA CONTACT: Schomaker, N. A. 513-684-4487

**670/2-75-054 PE 1BB034 ROAP/TASK 21 ASY 18 GRANT NO. WPD-112-01**

**Characterization and Treatment of Combined Sewer Overflows San Francisco, City of San Francisco, CA**

The report covers an evaluation of the laboratory and field results from the sampling of two combined sewage overflows representing 15% of the City's habitable area. The results of the study established mass discharge factors for many of the biological and chemical constituents of combined sewage. A major development of the study was a clearer understanding of the quantity of each constituent as related to time after start of storm. The information contained in the report will also be of significant interest to other communities with combined sewer systems. EPA CONTACT: Field, R. 201-548-3503

# NEW REPORT ABSTRACTS SECTION

**670/4-75-005 PE 1HA327 ROAP/TASK 01 AAD 02 IN-HOUSE PROJECT**

**Investigation of the Orion Research Cyanide Monitor BY R. J. O'Herron, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH**

The model 1206 Orion Research cyanide monitor was investigated using the Orion specifications and environmental considerations as a guide. Laboratory tests under controlled environmental conditions showed the electronic stability (drift) to be within 0.1% over the temperature range of 5°C to 35°C. Sensor stability, over the temperature range 5 C to 35°C was tested by applying free cyanide ion (standard solutions of 1 mg/1 and 10 mg/1) as direct input to the monitors. The results of these tests showed that Orion's specified tolerance of + 10% of reading was met. Two out of three electrode sets tested for linearity were within Orion's tolerance of + 0.02 ppm below 0.25 ppm and + 10% of readings above 0.25 ppm. Dynamic on-stream measurements were made from a metal plating process rinse stream in a field installation of the monitor, and these measurements were periodically compared with those of the standard method for total cyanide. This field installation compared with those of the standard method for total cyanide. This field installation revealed the comparisons were widely variable. Steady-state comparisons were made of field-collected samples with the standard method for determining total cyanide. These tests revealed that a 15% to 20% loss in cyanide concentration resulted from the required straining and filtering of the sample input to the monitor. EPA CONTACT: O'Herron, R. J. 513-684-2935

**680/1-75-001 PE 1FA082 ROAP/TASK 21 AMC IN-HOUSE PROJECT**

**Synergistic Effect of Polonium-210 and Cigarette Smoke in Rats BY S. C. Black, and E. W. Bretthauer, National Environmental Research Center, EPA Las Vegas, NV**

An experimental procedure was devised to test the possible synergistic effect of polonium-210 and cigarette smoke in rats. Appropriate techniques were developed to expose the rats to cigarette smoke through mouth-breathing and to add known amounts of polonium-210 to the cigarette smoke.

**680/4-75-002a PE 1HA327 ROAP/TASK 22 ADB IN-HOUSE PROJECT**

**Radioactivity Standards Distribution Program – 1975 Quality Assurance Research Laboratory, EPA Las Vegas, NV**

A program for the distribuiton of calibrated radioactive samples, as one function of EPA's quality assurance program for environmental radiation measurements, is described. Included is a discussion of the objectives of the distribution program and a description of the preparation, availability, and distribution of calibrated radioactive samples. Instructions and application forms are included for laboratories desiring to participate in the program. This document is not a research report. It is designed for use by personnel of laboratories participating or desiring to participate in the Radioactivity Standards Distribution Program which is a part of the U.S. Environmental Protection Agency's quality assurance program. EPA CONTACT: Jarvis, A

**680/4-75-002b PE 1HA327 ROAP/TASK 22 ADB IN-HOUSE PROJECT**

**Environmental Radioactivity Laboratory Intercomparison Studies Program—1975 National Environmental Research Center, EPA**

The U.S. Environmental Protection Agency's intercomparison studies program for laboratories involved in environmental radiation measurements is described. The types of environmental samples distributed, the analysis required for each sample, the distribution schedule, and the statistical analysis and reporting of results are discussed. Instructions and application forms are included for laboratories desiring to participate in the program. This document is not a research report. It is designed for use by laboratories participating or desiring to participate in this quality assurance program. Las Vegas, NV

**680/4-75-003 PE 1HA325 ROAP/TASK 22 ACS IN-HOUSE PROJECT**

**Development of a Biological Monitoring Network-A Test Case: Suitability of Livestock and Wildlife as Biological Monitors for Organophospharus Contaminants BY W. W. Sutton,** National Environmental Research Center, EPA Las Vegas, NV BY L. L. Salomon, Dugway Proving Ground Dugway, UT

Upon request by the NERC-LV, a review was conducted of a DPG monitoring network which is designed to establish baseline erythrocyte acetylcholinesterase (AChE) levels in the fauna of West Central Utah, and to evaluate the suitability of using livestock and wildlife as biological monitors for organophosphorus contaminants. Wildlife species sampled during these DPG efforts included the antelope ground squirrel, the ORD Kangaroo rat, the deer mouse, and the black-tailed jackrabbit. Individual blood samples from these wildlife species as well as samples from cattle and sheep were collected and analyzed for red cell AChE activity. The analytical method employed was based on the Warburg manometric technique. Results indicate that the range of red cell AChE activity values for both livestock and wildlife species is sufficiently compact to allow observation of the depression of enzymic activity that would result from organophosphorus exposures. Controlled studies have shown that, following exposure to organophorus chemicals, the red cell activity recovers in an essentially linear fashion. Additive effects resulting from the simultaneous exposure to military agent VX and either toxic plants or commercial pesticides are discussed.

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| SAB-73-001 | 1HA410 | **Nitrogenous Compounds in the Environment** Office of Research and Development, Science Advisory Board, EPA Washington, DC **ORDER FROM: NTIS-PB** 240 702/AS $7.00 **GPO-** EP1.2:N63 – $2.20 |
| 600/1-75-001 | 1GB090 | **Federal Noise Effects Research: FY 73 – FY 75 — Abstracted 600/9-75-001a** —Noise Technology Staff, EPA Washington, DC **ORDER FROM: NTIS-PB** 241 751/AS $6.25 |
| 600/1-75-002 | 1CA046 | **Formation of Halogenated Organics By Chlorination of Water Supplies** BY J. C. Morris, Harvard University Cambridge, MA **ORDER FROM: NTIS-PB** 241 511/AS $4.25 |
| 600/2-73-001 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 600/2-73-002 | 1BB034 | **Portable Device for Measuring Wastewater Flow in Sewers** BY M. A. Nawrocki, Hittman Associates, Inc. Columbia, MD **ORDER FROM: GPO-**EP1.23/2:600/2-73-002 $1.00 **NTIS-PB** 233 142 |
| 600/2-73-003 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 600/2-73-004 | 1BB033 | **Planned Maintenance Management System for Municipal Wastewater Treatment Plants** BY D. H. Sargent, and D. A. Ruich, Enviro Plan, Inc. College Park, MD **ORDER FROM: GPO-**EP1.23/2:600/2-73-004 $1.55 **NTIS-PB** 233 111 |
| 600/2-74-001 | 1AB013 | **Assessment of the Potential of Clean Fuels and Energy Technology** BY E. Hall, P. Choi, and E. Krope, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: GPO-**EP1.23/2:600/2-74-001 $2.60 **NTIS-PB** 239 970/AS $7.00 |
| 600/2-74-002 | 1AB013 | **Control of Environmental Impacts From Advanced Energy Sources** BY E. E. Hughes Jr., E. M. Dickson, and R. A. Schmidt, Stanford Research Institute Menlo Park, CA **ORDER FROM: GPO-**EP1.23/2:600/2-74-002 $4.00 **NTIS-PB** 239 450/AS $6.50 |
| 600/2-74-003 | 1BB045 | **Development of Phosphate – Free Heavy Duty Detergents** BY A. M. Schwartz, and A. E. Davis, Gillette Research Institute Rockville, MD **ORDER FROM: GPO-**EP1.23/2:600/2-74-003 $2.65 **NTIS-PB** 232 943 |
| 600/2-74-004 | 1AB015 | **Selected Characteristics of Hazardous Pollutant Emissions** BY L. J. Duncan, E. L. Keitz, and E. P. Krajeski, Mitre Corporation Washington, DC **ORDER FROM:** Pending |
| 600/2-74-005 | 1BB033 | **Development of a Monthly Technology Bulletin** BY D. A. Sandoski, Franklin Institute Research Laboratories Philiadelphia, PA **ORDER FROM: GPO-**EP1.23/2:600/2-74-005 $1.65 **NTIS-PB** 238 471/AS |
| 600/2-74-006 | 1BB036 | **Study of Feasibility of Herbicide Orange Chlorinolysis** BY E. A. Lavergne, Diamond Shamrock Corporation, T. R. Evans Research Center Painesville, OH **ORDER FROM:** Paul Des Rosiers 202 426-4170 |
| 600/2-74-007 | 1BB036 | **Development of a Monthly Industrial Technology Bulletin** BY J. S. Murphy, and D. A. Sandoski, Franklin Institute Research Laboratory Philadelphia, PA **ORDER FROM:** Pending |
| 600/2-74-008 | 1AB015 | **Proceedings, Symposium Control of Fine-Particulate Emissions from Industrial Sources, January 15–18, 1974 San Francisco, CA** Air Pollution Control Division, ORD, EPA Washington, DC **ORDER FROM: NTIS-PB** 235 829 $13.00 |
| 600/2-74-009a | 1BB036 | **State-of-The-Art For The Inorganic Chemicals Industry: Inorganic Pesticides — Abstracted 600/9-75-001a** --BY J. Patterson, Illinois Institute of Technology Chicago, IL **ORDER FROM: NTIS-PB** 240 959/AS $4.25 |
| 600/2-74-009b | 1BB036 | **State-of-The-Art For The Inorganic Chemicals Industry: Commercial Explosives — Abstracted 600/9-75-001a** --BY J. Patterson, Illinois Institute of Technology Chicago, IL **ORDER FROM:** PB No. Pending |
| 600/2-74-009c | 1BB036 | **State-of-The-Art For The Inorganic Chemicals Industry: Industrial Inorganic Gases — Abstracted 600/9-75-001a** —BY J. Patterson, Illinois Institute of Technology Chicago, IL **ORDER FROM: NTIS-PB** 240 961/AS $4.25 |

**Preceding page blank**

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 600/2-75-001 | 1BB036 | **Projects in the Industrial Pollution Control Division - December 1974 — Abstracted 600/9-75-001a —** Industrial Pollution Control Division, EPA Washington, DC **ORDER FROM:** PB No. Pending |
| 600/2-75-002 | 1GB090 | **Federal Surface Vehicle Noise Research, Development, and Demonstration Program: FY 73 - FY 75 — Abstracted 600/9-75-001a** —Noise Technology Staff, EPA Washington, DC **ORDER FROM: NTIS-PB** 241 887/AS $4.75 |
| 600/2-75-003 | 1GB090 | **Federal Aircraft Noise Research, Development, and Demonstration Programs: FY 73 - FY 75** Noise Technology Staff, EPA Washington, DC **ORDER FROM: NTIS-PB** 241 904/AS $7.25 |
| 600/2-75-004 | 1BB034 | **Contributions of Urban Roadway Usage to Water Pollution** BY D. G. Shaheen, Biospherics, Inc. Rockville, MD **ORDER FROM:** PB No. Pending |
| 600/2-75-005 | 1BB033 | **Municipal Water Pollution Control Abstracts for 1974** BY J. S. Murphy, Franklin Institute Research Laboratories Philadelphia, PA **ORDER FROM:** PB No. Pending |
| 600/2-75-006 | 1AB013 | **Detailed Cost Estimates For Advanced Effluent Desulfurization Processes** BY G. G. McGlamery, R. L. Torstrick, W. J. Broadfoot, J. P. Simpson, L. J. Henson, S. V. Tomlinson, and J. F. Young, Tennessee Valley Authority Muscle Shoals, TN **ORDER FROM:** PB No. Pending |
| 600/2-75-007a | 1BB042 | **Impact of Hydrologic Modifications on Water Quality** BY J. Bhutani, R. Holberger, W. E. Jacobsen, P. Spewak, and D. B. Truett, Mitre Corporation McLean, VA **ORDER FROM:** Pending |
| 600/2-75-007b | 1BB042 | **Bile on Hydrologic Modifications (HYMOD)** BY J. Bhutani, and P. Spewak, Mitre Corporation McLean, VA **ORDER FROM:** Pending |
| 600/2-75-008 | 1GB090 | **Federal Machinery Noise Research, Development and Demonstration: FY 73-75** Noise Technology Staff, EPA Washington, DC **ORDER FROM:** Pending |
| 600/2-75-009 | 1AB014 | **Oil Shale Air Pollution Control** BY E. E. Hughes, P. A. Budee, C. V. Fojo, R. G Murray, and R. K. White, Stanford Research Institute Menlo Park, CA **ORDER FROM:** Pending |
| 600/2-75-010 | 1GB090 | **Assessment of the Federal Noise Research, Development, and Demonstration Activities: FY 73 - FY 75** BY E. E. Berkau, S. R. Cordle, F. D. Hart, and G. R. Simon, Noise Technology Staff, EPA Washington, DC **ORDER FROM:** Pending |
| 600/2-75-011 | 1AB012 | **Study of $SO_x$ Control For Selected Industrial Boilers** BY J. Bhutani, C. B. Foster, E. M. Jamgochian, and E. P. Krajeski, Mitre Corporation McLean, VA **ORDER FROM:** Pending |
| 600/3-75-001 | 1BA031 | **Fisheries and Energy Production: A Symposium** BY S. B. Saila, Rhode Island, University of Kingston, RI **ORDER FROM:** PB No. Pending |
| 600/4-73-001a | 1HA325 | **Ground Water Pollution Features of Federal and State Laws and Regulations** BY F. Van Der Leeden, Geraghty and Miller, Inc. Port Washington, NY General Electric Company, Center for Advanced Studies, TEMPO Santa Barbara, CA **ORDER FROM: NTIS-PB** 232 116/AS $4.75 |
| 600/4-73-001b | 1HA325 | **Polluted Groundwater: Some Causes, Effects, Controls and Monitoring** BY C. F. Meyer, General Electric Company, Center for Advanced Studies, TEMPO Santa Barbara, CA **ORDER FROM: NTIS-PB** 232 117/AS $8.75 |
| 600/4-74-001 | 1HA325 | **Polluted Groundwater: A Review of the Significant Literature** BY D. K. Todd, General Electric Company, Center for Advanced Studies, TEMPO Santa Barbara, CA **ORDER FROM: NTIS-PB** 235 556/AS $5.75 |
| 600/4-74-002 | | **(No. Cancelled) ORDER FROM:** See 680/4-74-002 |
| 600/4-74-003 | | **(No. Cancelled) ORDER FROM:** See 680/4-74-003 |
| 600/4-74-004 | 1HA326 | **Proceedings of Seminar on Methodology for Monitoring the Marine Environment** Office of Monitoring Systems, EPA Washington, DC **ORDER FROM: GPO-**EP1.23/5:600/4-74-004 $4.90 **NTIS-PB** 239 052/AS |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 600/4-75-001 | 1HA325 | **Directory of EPA, State and Local Environmental Quality Monitoring and Assessment Activities** BY J. W. Scotton, and K. T. Mullen, Office of Monitoring Systems, EPA Washington, DC BY J. Whitman, and R. Citron, Smithsonian Institution Cambridge, MA **ORDER FROM: NTIS-PB** 241 757/AS $10.25 |
| 600/5-73-001 | 1HA094 | **Economic Damages to Household Systems From Water Supply Use** BY D. P. Tihansky, Office of Research and Development, Implementation Research Division, EPA Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5-73-001 $1.30 **NTIS-PB** 235 716/AS $3.30 |
| 600/5-73-002 | 1RW103 | **Bibliography of R&D Research Reports – July 1973** Office of Research and Development, Publications Staff, Office of Program Management, EPA Washington, DC **ORDER FROM:** (Superseded by Current Bibliography) |
| 600/5-73-003 | 1HA093 | **Intermedia Aspects of Air and Water Pollution Control** BY R. Stone, and H. Smallwood, Ralph Stone and Company, Inc. Los Angeles, CA **ORDER FROM: GPO-**EP1.23/3:600/5-73-003 $3.15 **NTIS-PB** 224 812/AS |
| 600/5-73-004 | 1AB013 | **Environmental Consideration in Future Energy Growth** Battelle Memorial Institute Columbus, OH **ORDER FROM: NTIS-PB** 239 157/AS $15.25 |
| 600/5-73-005 | 1HA094 | **Benefit of Water Pollution Control on Property Values** BY D. M. Dornbusch, and S. M. Barrager, David M. Dornbusch and Company San Francisco, CA **ORDER FROM: GPO-**EP1.23/3:600/5-73-005 $1.60 **NTIS-PB** 228 590/AS |
| 600/5-73-006 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 600/5-73-007 | 1HA096 | **Critique of Pollution Time Allocation in River Basin Model** BY P. G. Hammer Jr., North Carolina, University of, Center for Urban and Regional Studies Chapel Hill, NC **ORDER FROM: GPO-**EP1.23/3:600/5-73-007 $3.40 **NTIS-PB** 238 489 $5.90 |
| 600/5-73-008a | 1HA094 | **State-of-the-Art Review: Water Pollution Control Benefits and Costs – Volume I** BY S. G. Unger, M. J. Emerson, and D. L. Jordening, Development Planning and Research Associates, Inc. Manhattan, KS **ORDER FROM: GPO-**EP1.23/3:600/5-73-008a $1.45 **NTIS-PB** 228 603/AS |
| 600/5-73-008b | 1HA094 | **Research Needs and Priorities: Water Pollution Control Benefits and Cost – Volume II** BY D. L. Jordening, and J. K. Allwood, Development Planning and Research Associates, Inc. Manhattan, KS **ORDER FROM: GPO-**EP1.23/3:600/5-73-008b $2.10 **NTIS-PB** 228 602/AS |
| 600/5-73-009 | 1HA098 | **Aesthetics in Environmental Planning** BY M. Bagley, Stanford Research Institute Menlo Park, CA **ORDER FROM: GPO-**EP1.23/3:600/5-73-009 $2.05 **NTIS-PB** 229 574/AS |
| 600/5-73-010 | 1HA097 | **Managing the Environment** Office of Research and Development, Environmental Studies Division, EPA Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5-73-010 $7.05 **NTIS-PB** 238 062 $10.25 |
| 600/5-73-011 | 1HA097 | **Development of a Decision Room For Environmental Studies** BY J. G. Moore, Data Metric Corporation McLean, VA **ORDER FROM: NTIS-PB** 231 864/AS $4.25 |
| 600/5-73-012a | 1HA098 | **Studies in Environment – Volume I – Summary Report** BY M. Felder, Homer Hoyt Institute Washington, DC BY L. Llewellyn, National Bureau of Standards Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5-73-012a $1.45 **NTIS-PB** 240 786/AS $5.25 |
| 600/5-73-012b | 1HA098 | **Studies in Environment – Volume II – Quality of Life** BY K. E. Horsnback, J. Guttman, H. L. Himmelstein, A. Rappaport, and R. Reyna, Homer Hoyt Institute Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5-73-012b $1.85 **NTIS-PB** 240 787/AS $5.25 |
| 600/5-73-012c | 1HA098 | **Studies in Environment – Volume III – Pollution and the Municipality** BY P. C. Cooper, S. J. Kursch, J. R. Wakeland, M. Van Winkle, and M. A. Zoller, Homer Hoyt Institute Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5-73-012c $1.55 **NTIS-PB** 240 788/AS $5.25 |
| 600/5-73-012d | 1HA098 | **Studies in Environment – Volume IV – Consumption Differentials and the Environment** BY M. B. Olsen, E. E. Bickelhaupt, D. H. Grimsley, C. S. Lewis, and P. Scott, Homer Hoyt Institute Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5-73-012d $0.95 **NTIS-PB** 240 789/AS $4.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 600/5–73–012e | 1HA098 | **Studies in Environment – Volume V – Outdoor Recreation and the Environment** BY B. Kimmelstein, K. Bildstein, P. Bujak, W. Horton, and M. Savino, Homer Hoyt Institute Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–73–012e $1.40 **NTIS-PB** 240 790/AS $4.75 |
| 600/5–73–013 | 1HA096 | **State of the System (SOS) Model** BY E. R. Williams, Chase, Rosen and Wallace, Inc. Alexandria, VA **ORDER FROM: GPO-**EP1.23/3:600/5–73–013 $3.45 **NTIS-PB** 232 941/AS $10.00 |
| 600/5–73–014 | 1HA094 | **Enforcement Economics in Air Pollution Control** BY P. B. Downing, Virginia Polytechnic Institute Blacksburg, VA BY W. D. Watson Jr., Washington Environmental Research Center, Implementation Research Division, EPA Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–73–014 $1.50 **NTIS-PB** 240 963/AS $5.25 |
| 600/5–73–015 | 1HA098 | **Promoting Environmental Quality Through Urban Planning and Control** BY E. J. Kaiser, K. Elfers, S. Cohn, P. A. Reichert, M. M. Hufschmidt, and R. Stanland, North Carolina, University of Chapel Hill, NC **ORDER FROM: GPO-**EP1.23/3:600/5–73–015 $5.05 **NTIS-PB** 227 090 $11.50 |
| 600/5–73–016 | 1HA097 | **Environmental Management and Local Government** BY S. Carter, M. Frost, C. Rubin, and L. Sumark, International City Management Association Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–73–016 $3.80 **NTIS-PB** 232 955/AS |
| 600/5–73–017 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 600/5–74–001 | 1HA096 | **Simulation City Approach for Preparation of Urban Area Data Bases** BY A. Lemer, Alan M. Voorhees and Associates McLean, VA **ORDER FROM: GPO-**EP1.23/3:600/5–74–001 $1.25 |
| 600/5–74–002 | 1HA095 | **Review of Environmental Impact Assessment Methodologies** BY M. Warner, and E. H. Preston, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: GPO-**EP1.23/3:600/5–74–002 $0.70 **NTIS-PB** 236 609/AS |
| 600/5–74–003 | 1HA091 | **Cost Evaluation of Alternative Air Quality Strategies** BY S. E. Atkinson, and D. H. Lewis, Washington Environmental Research Center, Implementation Research Division, EPA Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–74–003 $1.05 |
| 600/5–74–004 | 1BA030 | **Design of Cost-Effective Water Quality Surveillance Systems** BY C. V. Beckers, and S. G. Chamberlain, Raytheon Company Portsmouth, RI **ORDER FROM: GPO-**EP1.23/3:600/5–74–004 $4.05 **NTIS-PB** 232 979/AS |
| 600/5–74–005 | 1HA095 | **Development of Predictions of Future Pollution Problems** BY J. E. Flinn, and R. S. Reiners, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: GPO-**EP1.23/3:600/5–74–005 $2.40 |
| 600/5–74–006 | 1HA095 | **Environmental Impact Requirements in the States: NEPA's Offspring** BY T. C. Trzyna, California Public Affairs, Center for Claremont, CA **ORDER FROM: GPO-**EP1.23/3:600/5–74–006 $1.30 **NTIS-PB** 234 384/AS |
| 600/5–74–007 | 1HA091 | **Feasibility of Emission Standards Based on Particle Size** BY L. J. Shannon, P. G. Gorman, and W. R. Park, Midwest Research Institute Kansas City, MO **ORDER FROM: GPO-**EP1.23/3:600/5–74–007 $2.50 **NTIS-PB** 236 160/AS $5.00 |
| 600/5–74–008 | 1HA096 | **Guide to Models in Governmental Planning and Operations** BY P. J. Gass, and R. L. Sisson, Mathematica, Inc. Bethesda, MD **ORDER FROM:** PB No. Pending |
| 600/5–74–009 | 1HA093 | **Cost-Effectiveness of a Uniform National Sulfur Emissions Tax** BY T. H. Bingham, P. C. Cooley, M. E. Fogel, and D. R. Johnston, Research Triangle Institute Research Triangle Park, NC **ORDER FROM: GPO-**EP1.23/3:600/5–74–009 $2.25 **NTIS-PB** 236 586/AS |
| 600/5–74–010 | 1BA030 | **Comprehensive Management of Phosphorus Water Pollution** BY D. B. Porcella, A. B. Bishop, and J. C. Andersen, Utah State University Logan, UT **ORDER FROM: GPO-**EP1.23/3:600/5–74–010 $4.05 **NTIS-PB** 232 958/AS |
| 600/5–74–011 | 1HA094 | **Environment: A Bibliography of Social Science and Related Literature** BY D. E. Morrison, K. E. Hornsback, and W. K. Warner, Michigan State University East Lansing, MI **ORDER FROM: GPO-**EP1.23/3:600/5–74–011 $7.45 **NTIS-PB** 237 948/AS $10.45 |
| 600/5–74–012 | 1AA004 | **Economic Damages of Air Pollution** BY T. E. Waddell, Washington Environmental Research Center, EPA Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–74–012 $2.35 **NTIS-PB** 235 701/As $3.95 |

## BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 600/5–74–013 | 1BA030 | **Water Quality Model for a Conjunctive Surface – Groundwater System** BY A. I. Perez, W. C. Huber, J. P. Heaney, and E. E. Pyatt, Florida, University of Gainesville, FL **ORDER FROM: GPO-**EP1.23/3:600/5–74–013 $3.30 **NTIS-PB** 238 491/AS $5.80 |
| 600/5–74–014 | 1BA030 | **Estimating Water Quality Benefits** BY D. L. Jordening, Development Planning and Research Associates, Inc. Manhattan, KS **ORDER FROM: GPO-**EP1.23/3:600/5–74–014 $1.50 |
| 600/5–74–015 | 1HA095 | **Use of Environmental Analyses on Wastewater Facilities by Local Government** BY J. C. Fensterstock, and D. M. Speaker, Teknekron, Inc. Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–74–015 $2.70 **NTIS-PB** 237 515/AS $7.00 |
| 600/5–74–016 | 1HA095 | **Assessment Methodology for the Environmental Impact of Water Resource Projects** BY M. Warner, J. Moore, S. Chatterjee, D. Cooper, C. Ifeader, W. Lawhon, and R. Reimers, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: GPO-**EP1.23/3:600/5–74–016 $3.00 **NTIS-PB** 240 002/AS $7.50 |
| 600/5–74–017 | 1HA094 | **Outpatient Medical Costs Related to Air Pollution in the Portland, Oregon Area** BY J. A. Jaksch, Washington Environmental Research Center, EPA Washington, DC BY H. H. Stoevener, Oregon State University Corvallis, OR **ORDER FROM: GPO-**EP1.23/3:600/5–74–017 $2.00 **NTIS-PB** 237 846/AS $4.00 |
| 600/5–74–018 | 1HA093 | **Crop Insurance and Information Services to Control Use of Pesticides** BY J. A. Myranowski, U. F. Ernst, and F. H. Cummings, ABT Associates, Inc. Cambridge, MA **ORDER FROM: GPO-**EP1.23/3:600/5–74–018 $1.55 **NTIS-PB** 238 356/AS $3.55 |
| 600/5–74–019 | 1HA095 | **Influences of Wastewater Management on Land Use: Tahoe Basin 1950–1972** BY J. Pepper, and R. Jorgensen, California, University of Santa Cruz, CA **ORDER FROM: GPO-**EP1.23/3:600/5–74–019 $2.50 **NTIS-PB** 240 247/AS $7.00 |
| 600/5–74–020 | 1HA098 | **Integrated Multi-media Pollution Model** BY I. Paik, J. Harrington, and S. W. McElroy, Georgetown University Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–74–020 $3.30 **NTIS-PB** 238 059/AS $5.80 |
| 600/5–74–021 | 1HA098 | **Carrying Capacity in Regional Environmental Management** BY A. B. Bishop, H. H. Fullerton, M. McKee, and M. D. Chambers, Utah State University Logan, UT **ORDER FROM: GPO-**EP1.23/3:600/5–74–021 $2.55 **NTIS-PB** 238 080 $7.00 |
| 600/5–74–022 | 1BA030 | **Demonstration of a State Water Quality Management Information System** Commonwealth of Pennsylvania Harrisburg, PA **ORDER FROM: GPO-**EP1.23/3:600/5–74–022 $2.05 **NTIS-PB** 237 282/AS |
| 600/5–74–023 | 1HA095 | **California Environmental Quality Act: Innovation in State and Local Decision making** BY T. C. Trzyna, and A. Jokela, California Public Affairs, Center for Claremont, CA **ORDER FROM: GPO-**EP1.23/3:600/5–74–023 $2.00 **NTIS-PB** 240 125/AS $5.75 |
| 600/5–74–024 | 1HA098 | **Regional Governmental Arrangements in Metropolitan Areas: Nine Case Studies** BY C. J. Hein, J. M. Keys, and G. M. Robbins, Institute for Community Studies Kansas City, MO **ORDER FROM: GPO-**EP1.23/3:600/5–74–024 $3.15 **NTIS-PB** 237 350/AS $5.65 |
| 600/5–74–025 | 1DA315 | **Used Oil Law in the U.S. and Europe** BY W. A. Irwin, and R. A. Liroff, Environmental Law Institute Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–74–025 $3.65 **NTIS-PB** 239 449/AS $6.15 |
| 600/5–74–026 | 1DA315 | **Economic Disincentives for Pollution Control: Legal Political and Administrative Dimensions** BY W. A. Irwin, and R. A. Liroff, Environmental Law Institute Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5–74–026 $2.35 **NTIS-PB** 239 340/AS $5.85 |
| 600/5–74–027 | 1HA096 | **Model Cities** BY G. Pidot, and J. Sommer, Dartmouth College Hanover, NH **ORDER FROM: GPO-**EP1.23/3:600/5–74–027 $1.25 **NTIS-PB** 239 719/AS $4.25 |
| 600/5–74–028 | 1BA030 | **Bibliography of Water Pollution Control Benefits and Costs** BY S. G. Unger, and D. L. Jordening, Development Planning and Research Associates, Inc. Manhattan, KS **ORDER FROM: GPO-**EP1.23/3:600/5–74–028 $2.55 **NTIS-PB** 239 424/AS $5.05 |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | |
|---|---|
| 600/5-74-029 | 1HA093 **Evaluation of Adjustment Assistance Program with Application for Pollution Control** BY A. M. Freeman III, Bowdoin College Brunswick, ME **ORDER FROM: GPO-**EP1.23/3:600/5-74-029 $1.45 **NTIS-PB** 239 423/AS $3.45 |
| 600/5-74-030 | 1BA030 **Evaluation of Marketable Effluent Permit Systems** BY R. J. DeLucia, Meta Systems, Inc. Cambridge, MA **ORDER FROM: GPO-**EP1.23/3:600/5-74-030 $4.15 **NTIS-PB** 239 418/AS $7.15 |
| 600/5-74-031 | 1BA030 **Analysis of Cost Sharing Programs for Pollution Abatement of Municipal Wastewater** BY H. E. Marshall, and R. T. Ruegg, National Bureau of Standards Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5-74-031 $2.10 **NTIS-PB** 239 420/AS $4.60 |
| 600/5-74-032 | 1DA315 **Waste Automotive Lubricating Oil Reuse as a Fuel** BY S. Chansky, J. Carroll, B. Kincannon, J. Sahagian, and N. Surprenant, GCA Corporation Bedford, MA **ORDER FROM: GPO-**EP1.23/3:600/5-74-032 $2.85 |
| 600/5-74-033 | 1HA093 **Economic and Environmental Benefits from Improving Electrical Rate Structures** BY M. Shareskin, Jack Faucett Company Chevy Chase, MD **ORDER FROM: GPO-**EP1.23/3:600/5-74-033 $2.55 **NTIS-PB** 239 451/AS $5.05 |
| 600/5-75-001 | 1BA030 **Evaluation of Alternative Methods For Financing Municipal Waste Treatment Works** BY R. J. DeLucia, L. M. Koppel, D. F. Luecke, S. J. Robinson, P. H. Schafer, D. V. Smith, and J. J. Wagner, Meta Systems, Inc. Cambridge, MA **ORDER FROM: NTIS-PB** 241 045/AS $7.25 |
| 600/5-75-002 | 1HA095 **Secondary Impact of Transportation and Wastewater Investments: Review and Bibliography — Abstracted 600/9-75-001a** --BY S. B. Bascom, K. G. Cooper, M. P. Howell, A. C. Makrides, and F. T. Rabe, Environmental Impact Center Newton, MA **ORDER FROM:** PB No. Pending |
| 600/5-75-003 | 1HA098 **Land Use Forms and the Environment – An Executive Summary — Abstracted 600/9-75-001a** --BY B. J. Berry, Chicago, University of Chicago, IL **ORDER FROM: NTIS-PB** 241 093/AS $3.75 |
| 600/5-75-004 | 1BA030 **Analysis of Nonpoint-Source Pollutants in the Missouri Basin Region — Abstracted 600/9-75-001a** --BY A. D. McElroy, F. Y. Chin, and A. Aleti, Midwest Research Institute Kansas City, MO **ORDER FROM:** PB No. Pending |
| 600/5-75-005 | 1HA098 **Performance Controls for Sensitive Lands: A Practical Guide For Local Administrators** BY C. Thurow, W. Toner, and D. Erley, American Society of Planning Officials Chicago, IL **ORDER FROM:** Pending |
| 600/5-75-006 | 1BA030 **Environmental Base and Management Study – Atchafalaya Basin, Louisiana** BY S. M. Gagliano, and J. L. Van Beek, Louisiana State University Baton Rouge, LA **ORDER FROM:** Pending |
| 600/5-75-007 | 1HA093 **Financial Incentives and Pollution Control: A Case Study** BY T. A. Ferrar, A. B. Brownstein, J. D. Simpson, and S. Streiter, Pennsylvania State University University Park, PA **ORDER FROM:** PB No. Pending |
| 600/5-75-008 | 1HA098 **Land Use Decision Methodology for Environmental Control** BY K. Wickersham, R. P. Hansen, and A. G. Melcher, Rocky Mountain Center on Environment Denver, CO **ORDER FROM:** PB No. Pending |
| 600/5-75-009 | 1HA098 **Land Use and the Environment: An Anthology of Readings** BY V. Curtis, American Society of Planning Officials Chicago, IL **ORDER FROM:** Pending |
| 600/5-75-010 | 1DB314 **Measuring External Effects of Solid Waste Management** BY W. Ramm, R. Schmalensee, R. Ramanathan, and D. Smallwood, Institute for Policy Analysis La Jolla, CA **ORDER FROM:** PB No. Pending |
| 600/5-75-011 | 1HA098 **Quality of Life Concept – A Potential New Tool For DecisionMakers** BY J. Gerba, Environmental Studies Division, EPA Washington, DC BY E. Bartholomew, Booz-Allen Public Administration Services, Inc. Washington, DC **ORDER FROM: GPO-**EP1.23/3:600/5-75-011 $7.00 **NTIS-PB** 225 089/2 $10.25 |
| 600/5-75-012 | 1HA098 **Minimum Standards For Quality of Life** BY O. W. Markley, and M. D. Badgley, Stanford Research Institute Menlo Park, CA **ORDER FROM:** Pending |
| 600/6-75-001 | 1AA001 **Scientific and Technical Assessment Report on Particulate Polycyclic Organic Matter (PPOM)** Special Studies Staff, EPA Research Triangle Park, NC **ORDER FROM:** Pending |
| 600/6-75-002 | 1AA001 **Scientific and Technical Assessment Report on Manganese** Special Studies Staff, EPA Research Triangle Park, NC **ORDER FROM:** Pending |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 600/6-75-003 | 1AA001 | **Scientific and Technical Assessment Report on Cadmium** Special Studies Staff, EPA Research Triangle Park, NC **ORDER FROM:** Pending |
| 600/9-74-001 | 1RW103 | **Indexed Bibliography of Office of Research and Development Reports** OR&D, Publication Staff, EPA Washington, DC **ORDER FROM:** (Superseded by Current Bibliography) |
| 600/9-74-002 | 1RW103 | **Indexed Bibliography of Office of Research and Development Reports – Updated to January 1975 — Abstracted 600/9-75-001a** --OR&D, Publication Staff, EPA Washington, DC **ORDER FROM:** OR&D, Publications Staff, EPA, Washington, DC 20460 |
| 600/9-75-001a | 1RW103 | **OR&D Publications Summary – March 1975** OR&D, Publications Staff, EPA Washington, DC **ORDER FROM: NTIS-PB** 241 782 $5.75 |
| 600/9-75-002 | 1RW103 | **OR&D ADP Workshop Proceedings No. 1** BY D. Swink, Office of Research and Development, EPA Washington, DC **ORDER FROM: NTIS-PB** 241 150/AS $9.25 |
| 600/9-75-003 | 1RW103 | **Scientific Seminar on Automotive Pollutants** Office of Environmental Sciences, EPA Washington, DC **ORDER FROM:** Pending |
| 650/1-73-001 | 1EA078 | **Training Manual for Teratology** BY K. D. Courtney, and N. Chernoff, Pesticides and Toxic Substances Effects Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 237 370 $3.75 |
| 650/1-73-002 | 1AA007 | **Interactions of Various Air Pollutants on Causation of Pulmonary Disease** BY J. D. Fenters, and R. Z. Maigetter, IIT Research Institute Chicago, IL **ORDER FROM: NTIS-PB** 230 933/AS $4.25 |
| 650/1-73-003 | 1AA005 | **Investigation of the Effects of Carbon Monoxide on Humans in the Driving Task** Ohio State University Research Foundation Columbus, OH **ORDER FROM: NTIS-PB** 237 370/AS $5.25 |
| 650/1-73-004 | 1AA005 | **Normal Carboxyhemoglobin Levels of Blood Donors in the United States** BY R. D. Stewart, Medical College of Wisconsin, Department of Environmental Medicine Milwaukee, WI **ORDER FROM: GPO-**EP 1.23/4:650/1-73-004 $3.10 **NTIS-PB** 222 250/AS |
| 650/1-74-001 | 1AA005 | **Use of Panelist as Substitutes for Taxicab Drivers in Carbon Monoxide Exposure** BY A. W. Hoover, and R. M. Albrecht, Columbia University, Division of Environmental Health Sciences New York City, NY **ORDER FROM: NTIS-PB** 228 783 $3.75 |
| 650/1-74-002 | 1EA078 | **Metabolism of Carbamate Insecticides** BY U. W. Dorough, Kentucky, University of, Department of Entomology Lexington, KY **ORDER FROM: NTIS-PB** 231 596/AS $8.50 |
| 650/1-74-003 | 1AA002 | **Development of Analytic Techniques to Measure Human Exposure to Fuel Additives** BY D. E. Johnson, J. B. Tillery, J. M. Hosenfeld, and J. W. Register, Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 232 124/AS $6.25 |
| 650/1-74-004 | 1AA005 | **Health Consequences of Sulfur Oxides: A Report from CHESS,1970–1971** BY E. Caldwell, Human Studies Laboratory, EPA Research Triangle Park, NC **ORDER FROM: GPO** EP 1.2:SU5/2/970-71 $3.10 |
| 650/1-74-005 | 1AA005 | **Effect of Carbon Monoxide on Time Perception** Medical College of Wisconsin, Department of Environmental Medicine Milwaukee, WI **ORDER FROM: NTIS-PB** 232 544/AS $4.25 |
| 650/1-74-006 | 1AA005 | **Study of the Effects of Low Levels of Carbon Monoxide Upon Humans Performing Driving Tasks** Harvard University, Guggenheim Center for Aerospace Health and Safety, Boston, MA **ORDER FROM: NTIS-PB** 233 894 $5.25 |
| 650/1-74-007 | 1AA005 | **Epidemiology of Chronic Respiratory Disease: A Literature Review** Michigan, University of Ann Arbor, MI **ORDER FROM: NTIS-PB** 237 375 $5.75 |
| 650/1-74-008 | 1AA002 | **Literature Search and Analysis of Information Regarding Sources, Uses, Production, Consumption, Reported Medical Cases and Toxicology of Platinum and Palladium** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 238 546/AS $3.75 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | |
|---|---|
| 650/1-74-009 | 1EA078 **Pesticides Epidemiological Field Studies** Miami, University of, School of Medicine Miami, FL **ORDER FROM: NTIS-PB** 237 347 $3.75 |
| 650/1-74-010 | 1AA005 **Reactivity of Polynuclear Aromatic Hydrocarbons with $O_2$ and NO in the Presence of Light** New York University, Chemistry Department New York, NY **ORDER FROM: NTIS-PB** 238 294/AS $3.75 |
| 650/1-74-011 | 1EA078 **Actions of Pesticides and Other Drugs on the Male Reproductive System** West Virginia University Medical Center Morgantown, WV **ORDER FROM: NTIS-PB** 237 381 $3.75 |
| 650/1-74-012 | 1EA078 **Study of the Ecology of Pesticides** Miami, University of Coral Gables, FL **ORDER FROM: NTIS-PB** 240 173/AS $4.25 |
| 650/1-74-013 | 1AA005 **Use of Leucocyte Metabolism as a Health Effects Indicator** Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 240 174/AS $5.25 |
| 650/1-75-001 | 1AA005 **Health and Annoyance Impact of Odor Pollution** California Department of Health Berkeley, CA **ORDER FROM:** Pending |
| 650/1-75-002 | 1EA078 **Occupational and Environmental Pesticide Exposure Study in South Florida** Miami, University of Miami, FL **ORDER FROM:** Pending |
| 650/1-75-003 | 1AA005 **Lead: Environmental Sources and Red Cell Toxicity in Urban Children** Nebraska, University of Omaha, NB **ORDER FROM:** Pending |
| 650/1-75-004 | 1EA078 **Fluorescence Immunoassay Technique for Detecting Organic Environmental Contaminants** IRT Corporation San Diego, CA **ORDER FROM:** Pending |
| 650/1-75-005 | 1AA005 **Air Pollution Exposure and Immunoglobulin Levels** Meloy Laboratiries, Inc. Springfield, VA **ORDER FROM:** Pending |
| 650/2-73-001 | 1AA010 **Chemical and Physical Characterization of Automotive Exhaust Particulate Matter in the Atmosphere (Year Ending June 30, 1972)** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 221 603 $4.75 |
| 650/2-73-002 | 1AA010 **Chemical and Physical Characterization of Automotive Exhaust Particulate Matter in the Atmosphere (Year Ending June 30, 1973)** Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Air Pollution Technical Information Center, RTP, NC 27711 |
| 650/2-73-003 | 1AA010 **Absorption of $SO_2$ by Alkaline Solutions in Venturi Scrubber Systems** BY C. Y. Wen, and S. Uchida, West Virginia University, Department of Chemical Engineering Morgantown, WV **ORDER FROM: NTIS-PB** 224 202/AS $4.75 |
| 650/2-73-004 | 1AB013 **Fate of Trace Constituents of Coal During Gasification** Institute of Gas Technology, IIT Center Chicago, IL **ORDER FROM: NTIS-PB** 223 001/AS $3.75 |
| 650/2-73-005 | 1AB014 **Program for Reduction of $NO_x$ from Tangential Coal-Fired Boilers – Phase 1** BY C. E. Blakeslee, and A. P. Selker, Combustion Engineering, Inc. Windsor, CT **ORDER FROM: NTIS-PB** 226 547/AS $7.00 |
| 650/2-73-006 | 1AA010 **Development of X-Ray Fluorescence Spectroscopy in Element Analysis of Particulate Matter Phase II: Evaluation of Commerical Multiple Crystal Spectrometer Instruments** BY L. S. Birks, and J. V. Gilfrich, Naval Research Laboratory Washington, DC **ORDER FROM: NTIS-PB** 762 061 $3.25 |
| 650/2-73-007 | 1AA010 **Evaluation and Modification of Fluoride Sampling and Analytical Methods** BY R. S. Sholtes, E. U. Meadows, and J. B. Koogler, Environmental Science and Engineering, Inc. Gainesville, FL **ORDER FROM: NTIS-PB** 230 954/AS $5.75 |
| 650/2-73-008 | 1AA010 **Development of a Supplementary Emission Measurements Monitoring System** Thunder Scientific Corporation Albuquerque, NM **ORDER FROM: NTIS-PB** 232 442/AS $3.75 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2–73–009 | 1AA010 | **Development and Fabrication of Mass Emission Data and Control System for the Stationary Source Simulator** BY P Dimouro, R. Reiner, and H. Dodds, Systems Technology Associates Falls Church, VA **ORDER FROM: NTIS–PB** 232 013/AS $6.25 |
| 650/2–73–010 | 1AA010 | **Development of Instrumentation for Measurement of Stationary Source Aldehyde Organic Acid and Amine Emissions** BY J. D. Bode, Bendix Research Laboratories Southfield, MI **ORDER FROM: NTIS–PB** 230 884/AS $4.75 |
| 650/2–73–011 | 1AA010 | **Direct Determination of Metals in Air** BY J. W. Robinson, Louisiana State University, Department of Chemistry Baton Rouge, LA **ORDER FROM: NTIS–PB** 226 774/AS $4.25 |
| 650/2–73–012 | 1AB013 | **Properties of Ammonium Sulfate, Ammonium, and Sulfur Dioxide Solutions in Ammonia Scrubbing Processes** BY J. E. Boone, and J. H. Turner, Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS–PB** 223 000 $3.75 |
| 650/2–73–013 | 1AB013 | **EPA Alkali Scrubbing Test Facility: Sodium Carbonate and Limestone Test Results** BY M. Epstein, L. Sybert, and I Raben, Bechtel Corporation San Francisco, CA **ORDER FROM: NTIS–PB** 225 041/3AS $15.00 |
| 650/2–73–014 | 1AB014 | **Investigation of Surface Combustion Concepts for $NO_x$ Control in Utility Boilers and Stationary Gas Turbines** BY W. U. Roessler, E. K. Weinberg, J. A. Drake, U. M. White, and Urban Programs Division El Segundo, CA **ORDER FROM: NTIS–PB** 224 424/AS $5.25 |
| 650/2–73–015 | 1AB014 | **Equimolar $NO_2$ Absorption into Magnesia Slurry – A Pilot Feasibility Study** Babcock and Wilson Company Alliance, OH **ORDER FROM: NTIS–PB** 223 579/AS $5.25 |
| 650/2–73–016 | 1AA010 | **Development of an Instrumental Monitoring Method for Measurement of Asbestos Concentrations in or Near Sources** BY A. Pattnaik, and J. D. Meakin, Franklin Institute Research Laboratories Philadelphia, PA **ORDER FROM: NTIS–PB** 226 471/AS $4.25 |
| 650/2–73–017 | 1AB013 | **Atmospheric Emissions From the Petroleum Refining Industry** BY W. White, National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS–PB** 225 040/5AS $4.25 |
| 650/2–73–018 | 1AB014 | **Catalytic Combustion, a Pollution-Free Means of Energy Conversion** National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS–PB** 223 002 $3.50 |
| 650/2–73–019a | 1AB013 | **Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume 1** Tennessee Valley Authority Chattanooga, TN **ORDER FROM: NTIS–PB** 228 447/AS $7.50 |
| 650/2–73–019b | 1AB013 | **Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume II – Appendices A through H** Tennessee Valley Authority Chattanooga, TN **ORDER FROM: NTIS–PB** 230 384/AS $9.50 |
| 650/2–73–019c | 1AB013 | **Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume III – Appendices I through L** Tennessee Valley Authority Chattanooga, TN **ORDER FROM: NTIS–PB** 230 385/AS $9.50 |
| 650/2–73–020 | 1AB013 | **Catalytic Oxidation of Sulfur Dioxide Using Isotopic Tracers** BY J. Happel, and M. Hnatow, New York University, School of Engineering New York City, NY **ORDER FROM: NTIS–PB** 224 305/AS $3.00 |
| 650/2–73–021 | 1AB014 | **Proceeding, Coal Combustion Seminar, June 19–20, 1973** National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS–PB** 224 210/AS $7.00 |
| 650/2–73–022 | 1AA010 | **State-of-the-Art: 1971 Instrumentation for Measurement of Particulate Emissions from Combustion Sources** BY G. J. Sem, and J. A. Borgos, Thermo-Systems, Inc. St. Paul, MN **ORDER FROM: NTIS–PB** 231 919/AS $5.25 |
| 650/2–73–023 | 1AA010 | **Manual Methods for Sampling and Analysis of Particulate Emissions From Municipal Incinerators** BY J. T. Funkhouser, E. T. Peters, P. L. Levins, A. Doyle, P. Giever, and J. McCoy, Arthur D. Little, Inc. Cambridge, MA **ORDER FROM: NTIS–PB** 238 476/AS $8.50 |
| 650/2–73–024 | 1AB013 | **Measurement and Characterization of Particles in Wet Scrubbing Process for $SO_x$ Control** Walter C. McCrone Associates, Inc. Chicago, IL **ORDER FROM: NTIS–PB** 225 083/5AS $7.00 |
| 650/2–73–025 | 1AA010 | **Application of Oder Technology to Mobil Sources Emission Instrumentation** BY P. L. Levins, and D. A. Kendall, Arthur D. Little, Inc. Cambridge, MA **ORDER FROM: NTIS–PB** 228 756 $4.75 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2-73-026 | 1AA010 | **Remote Sensing of Air Pollution in Urban Areas** BY M. L. Streiff, and C. B. Ludwig, General Dynamics Corporation San Diego, CA **ORDER FROM: NTIS-PB** 230 885/AS $6.25 |
| 650/2-73-027 | 1AA010 | **Instrument for Simultaneous Monitoring NO$_x$ and SO$_2$ in Stationary Sources** BY U. C. Tucker, and J. Chung, Monsanto Research Corporation Dayton, OH **ORDER FROM: NTIS-PB** 231 084/AS $3.75 |
| 650/2-73-028 | 1AB013 | **Enclosed Coke Pushing and Quenching System Design Manual** BY D. A. Pengidore, National Steel Corporation, Weirton Steel Division Weirton, WV **ORDER FROM: NTIS-PB** 226 418/AS $4.75 |
| 650/2-73-029 | 1AB014 | **Interactions of Stack Gas Sulfur and Nitrogen Oxides on Dry Berkau** BY J. W. Brown, D. W. Pershing, J. U. Wasser, and E. E. Berkau, Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 224 208/AS $3.25 |
| 650/2-73-030 | 1AA010 | **Instrument to Monitor CH$_4$, CO and CO$_2$ in Auto Exhaust** BY D. E. Burch, and J. D. Pembrook, Philco-Ford Corporation, Aeronutronic Division Newport Beach, CA **ORDER FROM: NTIS-PB** 226 438/AS $3.75 |
| 650/2-73-031 | 1AB014 | **Effectiveness of Selected Fuel Additives in Controlling Pollution Emissions From Residual Oil-Fired Boilers** BY D. W. Pershing, G. B. Martin, E. E. Berkau, and R. E. Hall, Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 225 037/1AS $3.75 |
| 650/2-73-032 | 1AA010 | **Development of a High-Purity for High Temperature Particulate Sampling and Analysis** BY A. L. Benson, P. L. Levins, A. A. Massucco, and J. R. Valentine, Arthur D. Little, Inc. Cambridge, MA **ORDER FROM: NTIS-PB** 230 886/AS $4.75 |
| 650/2-73-033a | 1AB014 | **Aerodynamic Control of Nitrogen Oxides and Other Pollutants From Fossil Fuel Combustion Volume I – Data Analysis and Summary of Conclusions** BY D. R. Shoffstall, and D. H. Larson, Institute of Gas Technology, IIT Center Chicago, IL **ORDER FROM: NTIS-PB** 229 102/AS $4.75 |
| 650/2-73-033b | 1AB014 | **Aerodynamic Control of Nitrogen Oxides and Other Pollutants from Fossil Fuel Combustion Volume II – Raw Data and Experimental Equipment** BY D. R. Shoffstall, and D. H. Larson, Institute of Gas Technology, IIT Center Chicago, IL **ORDER FROM:** Chemical Systems Lab., NERC, RTP, NC 27711 |
| 650/2-73-034 | 1AA010 | **Interferometric Instrumentation For Particle Size Analysis** Arnold Research Organization, Inc. Arnold Air Force Station, TN **ORDER FROM: NTIS-PB** 240 584/AS $4.25 |
| 650/2-73-035 | 1AB012 | **Field Measurements of Particle Size Distribution Sizing Devices** BY J. D. McCain, K. M. Cushing, and A. V. Bird Jr., Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 226 292/AS $4.75 |
| 650/2-73-036 | 1AB012 | **Feasibility of Flux Force/Condensation Scrubbing for Fine Particulate Collection** BY S. Calvert, J. Goldshmid, D. Leith, and N. Jhaveri, A.P.T,. Inc. Riverside, CA **ORDER FROM: NTIS-PB** 227 307 $6.25 |
| 650/2-73-037 | 1AA010 | **Feasibility of a CW Lidar Technique for Measurement of Plume Opacity** BY R. A. Ferguson, Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 231 992/AS $5.25 |
| 650/2-73-038 | 1AB013 | **Proceedings: Flue Gas Desulfurization Symposium 1973** BY E. L. Plyler, and M. A. Maxwell, Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 230 901/AS $29.25 |
| 650/2-73-039 | 1AB013 | **Chemically Active Fluid-Bed Process for Sulphur Removal During Gasification of Heavy Fuel Oil—Second Phase** Esso Research Company Linden, NJ **ORDER FROM:** Chemical Systems Lab., NERC, RTP, NC 27711 |
| 650/2-73-040 | 1AA010 | **Development of Range Squared and Off-Gating Modifications for a Lidar System** General Electric Company, Space Sciences Laboratory Philadelphia, PA **ORDER FROM: NTIS-PB** 228 715 $4.25 |
| 650/2-73-041 | 1AB013 | **Demetallization of Heavy Residual Oils** BY W. C. Rovesti, and R. H. Wolk, Hydrocarbon Research, Inc. Trenton, NJ **ORDER FROM: NTIS-PB** 227 568 $10.25 |
| 650/2-73-041a | 1AB013 | **Demetallization of Heavy Residual Oils – Phase II** Hydrocarbon Research, Inc. Trenton, NJ **ORDER FROM: NTIS-PB** 241 901/AS $4.25 |
| 650/2-73-042 | 1AB013 | **Gasification of Fossil Fuels Under Oxidative, Reductive, and Pyrolytic Conditions** Scientific Research Instruments Corporation Baltimore, MD **ORDER FROM: NTIS-PB** 228 668/AS $7.00 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2-73-043 | 1AA008 | **Capacity of the Soil as a Natural Sink for Carbon Monoxide** BY R. B. Ingersoll, Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 221 641 $3.75 |
| 650/2-73-044 | 1AB013 | **Petrograhpic Characteristics and Physical Properties of Marls, Chalks, Shells and Their Calcines Related to Desulfurization of Flue Gases** BY R. D. Harvey, R. R. Frost, and J. Thomas Jr., Illinois State Geological Survey Urbana, IL **ORDER FROM: NTIS-PB** 226 321/AS $5.25 |
| 650/2-73-045 | 1AB014 | **Study of Combustor Flow Computations and Comparison with Experiment** BY R. F. Anasoulis, and H. McDonald, United Aircraft Research Laboratories East Hartford, CT **ORDER FROM: NTIS-PB** 230 008/AS $4.75 |
| 650/2-73-046 | 1AB015 | **Atmospheric Emissions from the Asphalt Industry** BY L. L. Laster, Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 222 372/AS $3.75 |
| 650/2-73-047 | 1AB013 | **Absorption of $SO_2$ into Lime Slurries: Absorption Rates and Kinetics** BY J. E. Vivian, Massachusetts Institute of Technology, Department of Chemical Engineering Cambridge, MA **ORDER FROM: NTIS-PB** 230 936/AS $4.25 |
| 650/2-73-048a | 1AB013 | **Evaluation of the Fluidized-Bed Combustion Process Volume I – Pressurized Fluidized-Bed Combustion Process Development and Evaluation** Westinghouse Research Laboratories Pittsburgh, PA **ORDER FROM: NTIS-PB** 231 162/AS $10.00 |
| 650/2-73-048b | 1AB013 | **Evaluation of the Fluidized-Bed Combustion Process Volume II – Fluidized Bed Boiler Combined-Cycle Power Plant Development—Volume I Appendices** Westinghouse Research Laboratories Pittsburgh, PA **ORDER FROM: NTIS-PB** 231 163/AS $8.50 |
| 650/2-73-048c | 1AB013 | **Evaluation of the Fluidized-Bed Combustion Process Volume III – Pressurized Fluidized-Bed Boiler Development Plant Design** Westinghouse Research Laboratories Pittsburgh, PA **ORDER FROM: NTIS-PB** 232 433/AS $8.75 |
| 650/2-73-048d | 1AB013 | **Evaluation of the Fluidized-Bed Combustion Process Volume IV – Fluidized-Bed Gasification Desulfurization** Westinghouse Research Laboratories Pittsburgh, PA **ORDER FROM: NTIS-PB** 233 101 $10.00 |
| 650/2-73-049 | 1AB013 | **Production of Clean Fuel Gas From Bituminous Coal** Consolidation Coal Company, Incorporated, Research Division Library, PA **ORDER FROM: NTIS-PB** 232 695/AS $8.50 |
| 650/2-73-050 | 1AA010 | **Methods for Rapid and Accurate Measurement of Nitrate and Sulfate in Atmospheric Particulates** BY D. Williams, J. Driscoll, C. Curtin, and R. Hebert, Walden Research Division of Abcor, Inc. Cambridge, MA **ORDER FROM: NTIS-PB** 230 887/AS $5.25 |
| 650/2-73-051 | 1AB013 | **Marketing $H_2SO_4$ from $SO_2$ Abatement Sources— The TVA Hypothesis** Tennessee Valley Authority, Office of Agricultural and Development Muscle Shoals, AL **ORDER FROM: NTIS-PB** 231 671/AS $5.25 |
| 650/2-73-052 | 1AA010 | **Development of Instrumentation for Quantitative Collection of Total Atmospheric Mercury From Ambient Air-Final Report** BY D. J. Sibbett, and R. C. Wade, Geomet, Inc. Rockville, MD **ORDER FROM: NTIS-PB** 232 300/AS $5.75 |
| 650/2-73-053 | 1AB013 | **Proceedings of Third International Conference on Fluidized-Bed Combustion** BY B. Tilton, Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 231 977/AS $12.50 |
| 650/2-74-001 | 1AB013 | **Regenerative Limestone Process for Fluidized – Bed Coal Combustion and Desulfurization** BY R. C. Hoke, M. S. Nutkis, L. A. Ruth, and H. Shaw, Esso Research and Engineering Company Linden, NJ **ORDER FROM: NTIS-PB** 231 374 $5.25 |
| 650/2-74-002a | 1AB014 | **Effects of Design and Operating Variables on $NO_x$ from Coal-Fired Furnaces— Phase I** BY W. J. Armento, Babcock and Wilson Company Alliance, OH **ORDER FROM: NTIS-PB** 229 986/AS $5.75 |
| 650/2-74-002b | 1AB014 | **Effects of Design and Operating Variables on $NO_x$ from Coal-Fired Furnaces – Phase II** Babcock and Wilson Company Alliance, OH **ORDER FROM: NTIS-PB** 241 283/AS $6.25 |
| 650/2-74-003 | 1AB014 | **Study of Air Pollutant Emissions from Residential Heating Systems** BY R. E. Hall, J. H. Wasser, and E. E. Berkau, Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 229 697/AS $5.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2-74-004 | 1AB013 | **Iron Foundry Cupola Recuperative Emission Control Demonstration — Design Manual** BY J. F. Coursey, Flynn and Emrich Company Baltimore, MD **ORDER FROM: NTIS-PB** 227 875 $4.25 |
| 650/2-74-005 | 1AB015 | **Indigester Black Liquor Oxidation for Odor Control in Kraft Pulping** BY W. T. McKean, and J. S. Gratzl, North Carolina State University, Department of Wood and Paper Sciences Raleigh, NC **ORDER FROM: NTIS-PB** 228 692 $5.25 |
| 650/2-74-006 | 1AA010 | **Device Collection and Assay of Ambient Gases** BY P. Tsang, Bendix Research Laboratories Southfield, MI **ORDER FROM: NTIS-PB** 231 364/AS $5.25 |
| 650/2-74-007 | 1AB012 | **Particulate Emissions from Alfalfa Dehydrating Plants — Control Costs and Effectiveness** BY K. D. Smith, American Dehydrators Association Mission, KS **ORDER FROM: NTIS-PB** 227 448/AS $4.50 |
| 650/2-74-008a | 1AA010 | **Evaluation of Odor Measurement Techniques Volume I – Animal Rendering Industry** BY J. A. Wahl, R. A. Duffee, and W. A. Marrone, Research Corporation of New England Wethersfield, CT **ORDER FROM: NTIS-PB** 228 186/AS $4.75 |
| 650/2-74-009a | 1AB013 | **Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification Section I: Koppers-Totzek Process** BY E. M. Magee, C. E. Jahnig, and H. Shaw, Esso Research and Engineering Company Linden, NJ **ORDER FROM: NTIS-PB** 231 675/AS $4.25 |
| 650/2-74-009b | 1AB013 | **Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification; Section I: Synthane Process** BY C. D. Kalfadelis, and E. M. Magee, Esso Research and Engineering Company Linden, NJ **ORDER FROM: NTIS-PB** 237 113/AS $4.75 |
| 650/2-74-009c | 1AB013 | **Evaluation of Pollution Control in Fossil Fuel Conversion Processess Gasification; Section I; Lurgi Process** Exxon Research and Engineering Company Linden, NJ **ORDER FROM: NTIS-PB** 237 694/AS $4.75 |
| 650/2-74-009d | 1AB013 | **Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification; Section I: CO2 Acceptor Process** Exxon Research and Engineering Company Linden, NJ **ORDER FROM: NTIS-PB** 241 141/AS $4.25 |
| 650/2-74-009e | 1AB013 | **Evaluation of Pollution Control in Fossil Fuel Conversion Processes Liquefaction: Section I. COED Process** Exxon Research and Engineering Company Linden, NJ **ORDER FROM: NTIS-PB** 240 371/AS $4.25 |
| 650/2-74-009f | 1AB013 | **Evaluation of Pollution Control in Fossil Fuel Conversion Processes Liquefaction: Section 2. SRC Process** Exxon Research and Engineering Company Linden, NJ **ORDER FROM: NTIS-PB** 241 792/AS $4.75 |
| 650/2-74-009g | 1AB013 | **Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification: Section 5. El-GAS Process** Exxon Research and Engineering Company Linden, NJ **ORDER FROM:** Pending |
| 650/2-74-010 | 1AB013 | **EPA Alkali Scrubbing Test Facility: Limestone Wet Scrubbing Test Result** BY M. Epstein, L. Sybert, S. C. Wang, and C. C. Leiro, Bechtel Corporation San Francisco, CA **ORDER FROM: NTIS-PB** 232 359/AS $7.50 |
| 650/2-74-011 | 1AB014 | **Thermal Radiation Modeling for Pollution Predictions** BY G. R. Whitacre, R. A. McCann, and A. A. Putmann, Battelle Memorial Institute Columbus, OH **ORDER FROM: NTIS-PB** 229 666/AS $4.25 |
| 650/2-74-012 | 1AB013 | **Evaluation of the Regenerative Pressurized Fluidized-Bed Combustion Process** BY T. E. Johnson, A. G. Sliger, P. A. Refrancois, and D. O. Moore, M. W. Kellogg Company Houston, TX **ORDER FROM: NTIS-PB** 233 429/AS $4.75 |
| 650/2-74-013 | 1AA010 | **Performance Specifications for Stationary-Source Monitoring Systems for Gases and Visible Emissions** BY J. S. Nader, W. Conner, and F. Jaye, National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 230 934/AS $7.00 |
| 650/2-74-014 | 1AA010 | **Development of Low Pressure Impactor** Anderson 2000, Inc. Atlanta, GA **ORDER FROM: NTIS-PB** 237 417/AS $4.25 |
| 650/2-74-015 | 1AA010 | **Progress in Instrumentation and Techniques for Measurement of Air Pollutants** BY B. Tilton, Chemistry and Physics Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 231 568/AS $3.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2-74-016 | 1AA010 | **Sampling Interface for Quantitative Transport of Aerosols** IIT Research Institute Chicago, IL **ORDER FROM: NTIS-PB** 240 434/AS $5.75 |
| 650/2-74-017 | 1AB013 | **Kinetic Mechanisms Governing the Fate of Chemically Bound Sulfur and Nitrogen in Combustion** BY C. V. Sternling, and J. O. Wendt, Shell Development Company Emeryville, CA **ORDER FROM: NTIS-PB** 230 895/AS $5.75 |
| 650/2-74-018 | 1AB012 | **State-of-the-Art Report on Sampling of Particulates in Combustion Gases from Fossil Fuels** Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Pending |
| 650/2-74-019 | 1AA003 | **Development and Testing of An Air Monitoring System** BY C. E. Decker, J. B. Tommerdahl, and T. M. Royal, Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 231 666/AS $7.25 |
| 650/2-74-020 | 1AA010 | **Feasibility Study of the Use of Resonance Scattering for the Remote Detection of $SO_2$** United Aircraft Research Laboratories East Hartford, CT **ORDER FROM:** Pending |
| 650/2-74-021 | 1AB013 | **Efficiencies in Power Generation** Monsanto Research Corporation Dayton, OH **ORDER FROM: NTIS-PB** 234 160/AS $3.75 |
| 650/2-74-022 | 1AB013 | **Coke Charging Pollution Control Demonstration** American Iron and Steel Institute New York, NY **ORDER FROM: NTIS-PB** 234 355/AS $9.25 |
| 650/2-74-023 | 1AB014 | **Flame Characterization Probes** BY R. C. Kesselring, Rocketdyne, Division of Rockwell International Corporation Canoga Park, CA **ORDER FROM: NTIS-PB** 232 287/AS $7.00 |
| 650/2-74-024 | 1AB013 | **Development of Sampling and Analytical Methods of Lime/Limestone Wet Scrubbing Tests** Radian Corporation Austin, TX **ORDER FROM: NTIS-PB** 236 644/AS $7.00 |
| 650/2-74-025 | 1AB013 | **Applicability of the Meyers Process of Chemical Desulfurization of Coal: Initial Survey of Fifteen Coals** BY A. A. Lee, J. W. Hamersma, M. L. Kraft, C. A. Flegal, and R. A. Meyers, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 232 083/AS $7.00 |
| 650/2-74-026 | 1AB015 | **Investigation of Particulate Emission from Oil-Fired Residential Heating Units** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 237 355/AS $3.75 |
| 650/2-74-027 | 1AB012 | **Control Technology for Fine Particulate Emissions** Midwest Research Institute Kansas City, MO **ORDER FROM: NTIS-PB** 236 646/AS $5.75 |
| 650/2-74-028 | 1AB012 | **Lone Star Steel Steam-Hydro Air Cleaning System Evaluation** BY J. D. McCain, and W. B. Smith, M. W. Kellogg Company Houston, TX **ORDER FROM: NTIS-PB** 232 436/AS $3.75 |
| 650/2-74-029 | 1AA010 | **Compact Sampling System for Collection of Particulates from Stationary Sources** General Electric Company Philadelphia, PA **ORDER FROM: NTIS-PB** 240 398/AS $5.25 |
| 650/2-74-030 | 1AB013 | **Interpretative Compilation of EPA Studies Related to Coal Quality and Cleanability** BY L. Hoffman, J. B. Truett, and S. J. Aresco, Mitre Corporation McLean, VA **ORDER FROM: NTIS-PB** 232 011/AS $8.50 |
| 650/2-74-031a | 1AB014 | **Application of Holographic Methods to the Measurement of Flames and Particulate – Volume I** TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 235 674/AS $3.75 |
| 650/2-74-031b | 1AB014 | **Application of Holographic Methods to the Measurement of Flames and Particulate – Volume II** TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 235 675/AS $4.50 |
| 650/2-74-032 | 1AB014 | **Design Trends and Operating Problems in Combustion Modification of Industrial Boilers** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 235 712/AS $5.50 |
| 650/2-74-033 | 1AB013 | **Solid Waste Disposal Final Report** Radian Corporation Austin, TX **ORDER FROM: NTIS-PB** 233 144/AS $9.25 |
| 650/2-74-034 | 1AB012 | **Optical Measurements of Smoke Particle Size Generated by Electric Arcs** Colorado State University Fort Collins, CO **ORDER FROM:** Pending |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2-74-035 | 1AB013 | **Evaluation of Equations for Designing Ammoniacal Scrubbers to Remove Sulfur Oxides from Waste Gas** BY L. I. Griffin, National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 232 527 $4.25 |
| 650/2-74-036 | 1AB012 | **Braxton Sonic Agglomerator Evaluation** BY R. Dennis, R. Bradway, and R. Cass, GCA Corporation Bedford, MA **ORDER FROM: NTIS-PB** 234 146/AS $7.25 |
| 650/2-74-037a | 1AB013 | **Disposal of By-products from Non-regenerable Flue Gas Desulfurization Systems: Initial Report** Aerospace Corporation El Segundo, CA **ORDER FROM: NTIS-PB** 237 114/AS $9.25 |
| 650/2-74-038 | 1AB014 | **Combustion Control of Pollutants from Multiburner Coal-fired System** BY C. McCann, J. Demeter, R. Snedden, and D. Bienstock, U.S. Bureau of Mines Pittsburgh, PA **ORDER FROM: NTIS-PB** 233 037/AS $4.75 |
| 650/2-74-039 | 1AA010 | **Evaluation of Instrumentation for Monitoring Total Mercury Emissions from Stationary Sources** Walden Research Division of Abcor, Inc. Walden, MA **ORDER FROM: NTIS-PB** 238 323/AS $5.75 |
| 650/2-74-040 | 1AA010 | **Synthesis and Purification of Carcinogenic Polynuclear Aromatic Hydrocarbon Standards** Allied Chemical Corporation Morristown, NJ **ORDER FROM: NTIS-PB** 240 201/AS $4.25 |
| 650/2-74-041 | 1AB013 | **Effect of Gas Turbine Efficiency and Fuel Cost on Cost Producing Electric Power** Monsanto Research Corporation Dayton, OH **ORDER FROM: NTIS-PB** 234 159/AS $3.75 |
| 650/2-74-042 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 650/2-74-043 | 1AB012 | **Proceedings: Symposium on the Use of Fabric Filters for the Control of Submicron Particulates (April 8–10, 1974, Boston, Ma.)** GCA Corporation Bedford, MA **ORDER FROM: NTIS-PB** 237 629/AS $9.25 |
| 650/2-74-044 | 1AA010 | **Isolation of Hayfever Antigens from Short Ragweed Pollen** Worthington Biochemical Corporation Freehold, NJ **ORDER FROM: NTIS-PB** 237 691/AS $3.25 |
| 650/2-74-045 | 1AB014 | **Kinetic Mechanisms of Methane/Air Combustion with Pollutant Formation** Ultrasystems, Inc. Irvine, CA **ORDER FROM: NTIS-PB** 234 149/AS $5.25 |
| 650/2-74-046a | 1AA010 | **Development of Gas Laser System to Measure Trace Gases by Longpath Absorption Techniques:Volume I – Gas Laser System Modification for Ozone Monitoring Final Report** BY S. E. Craig, D. R. Morgan, D. L. Roberts, and L. R. Snowman, General Electric Company Pittsfield, MA **ORDER FROM: NTIS-PB** 236 679/AS $3.75 |
| 650/2-74-046b | 1AA010 | **Development of A Gas Laser System to Measure Trace Gases by Long Path Absorption Techniques: Volume II – Field Evaluation of Gas Laser System for Ozone Monitoring Final Report** BY W. A McClenny, F. W. Buity Jr., R. E. Baumgardner Jr., and R. A. Gray, Chemistry and Physics Laboratory, EPA, Research Triangle Park, NC BY R. J. Gillmeister, and L. R. Snowman, General Electric Company Pittsfield, MA **ORDER FROM:** Pending |
| 650/2-74-047 | 1AB014 | **Design of an Optimum Distillate Oil Burner for Control of Pollutant Emissions** Rocketdyne, Division of Rockwell International Canoga Park, CA **ORDER FROM: NTIS-PB** 236 647/AS $16.50 |
| 650/2-74-048 | 1AB015 | **Development of an Approach to Identification of Emerging Technology and Demonstration Opportunities** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 233 646 $8.50 |
| 650/2-74-049a | 1AB013 | **Pilot-Plant Study of an Ammonia Absorption Ammonium Bisulfate Regeneration Process, Topical Report Phases I and II** Tennessee Valley Authority Chattanooga, TN **ORDER FROM: NTIS-PB** 237 171/AS $7.00 |
| 650/2-74-050 | 1AB013 | **Measurement of Entrained Liquid Levels in Effluent Gases from Scrubber Demisters** BY L. D. Johnson, and R. M. Statnick, National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 223 739 $3.25 |
| 650/2-74-051 | 1AB014 | **Assessment of the Applicability of Automotive Emission Control Technology to Stationary Engines** Aerospace Corporation Los Angeles, CA **ORDER FROM:** Pending |
| 650/2-74-052 | 1AB013 | **Study of Potential Problems and Optimum Opportunities in Retrofitting Industrial Processes to Low and Intermediate Energy Gas from Coal** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 237 116/AS $5.75 |

## BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 650/2-74-053 | 1AB013 | **Particulate Collection Study, EPA/TVA Full-Scale Dry Limestone Injection Tests** Cottrell Environmental Systems, Inc. Division of Research-Cottrell, Inc. Bound Brook, NJ **ORDER FROM:** Pending |
| 650/2-74-054 | 1AB013 | **Occurrence and Distribution of Potentially Volatile Trace Elements in Coal** Illinois State Geological Survey Springfield, IL **ORDER FROM: NTIS-PB** 238 091/AS $4.75 |
| 650/2-74-055 | 1AA010 | **Design, Construction, and Testing of a Commercial Prototype Disc Diluter** Monsanto Research Corporation Dayton, OH **ORDER FROM:** Pending |
| 650/2-74-056 | 1AA003 | **Development of an Acetylene Monitor at the PPB Level** Beckman Instruments, Inc. Anaheim, CA **ORDER FROM: NTIS-PB** 238 474/AS $3.75 |
| 650/2-74-057 | 1AB013 | **Reduction of Atmospheric Pollution by the Application of Fluidized-Bed Combustion** Argonne National Laboratory Argonne, IL **ORDER FROM: NTIS-PB** 237 366/AS $5.75 |
| 650/2-74-058 | 1AB012 | **Applying Fabric Filtration to Coal Fired Industrial BoilersA Preliminary Pilot Scale Investigation** Enviro-System and Research, Inc. Roanoke, VA **ORDER FROM: NTIS-PB** 237 117/AS $4.75 |
| 650/2-74-059 | 1AA010 | **$NO_2$ Measuring System** Aerospace Corporation Los Angeles, CA **ORDER FROM: NTIS-PB** 234 255/AS $3.75 |
| 650/2-74-060 | 1AA002 | **Development of a Methodology for the Assessment of the Effects of Fuels and Additives on Control Devices** Dow Chemical Company Midland, MI **ORDER FROM:** Pending |
| 650/2-74-061 | 1AA003 | **Determination of Effect of Particulate Exhaust Emissions of Additives and Impurities in Gasoline** Dow Chemical Company Midland, MI **ORDER FROM:** Pending |
| 650/2-74-062 | 1AB013 | **Coke Oven Charging Emission Control Test Program—Volume I** Mitre Corporation McLean, VA **ORDER FROM: NTIS-PB** 237 628/AS $7.00 |
| 650/2-74-062a | 1AB013 | **Coke Oven Charging Emission Control Tert Program – Supplemental Observations** Mitre Corporation McLean, VA **ORDER FROM: NTIS-PB** 237 697/AS $5.25 |
| 650/2-74-063 | 1AB015 | **Adsorption of Odorous Pollutants by Active Manganese Dioxide** Illinois, University of School of Chemical Sciences Urbana, IL **ORDER FROM: NTIS-PB** 234 458/AS $3.75 |
| 650/2-74-064 | 1AB013 | **Instrumental Analyses for Wet Scrubbing Processes** TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 240 616/AS $9.25 |
| 650/2-74-065 | 1AA010 | **Advanced Prototype Direct Reading Instrument for Particulate Mass Measurement** Industrial Nucleonics Corporation Columbus, OH **ORDER FROM:** Pending |
| 650/2-74-066 | 1AB014 | **Field Testing: Application of Combustion Modifications to Control $NO_x$ Emissions for Utility Boilers** Exxon Research and Engineering Company Linden, NJ **ORDER FROM: NTIS-PB** 237 344/AS $7.25 |
| 650/2-74-067 | 1AB012 | **Design Development and Fabrication of a Prototype High-Vol. Particulate Mass Sampling Train** Aerotherm/Acurex Corporation Mountain View, CA **ORDER FROM:** Pending |
| 650/2-74-068 | 1AA010 | **Design, Fabricate, and Demonstrate an Instrument for Assaying Benzo (a) Pryrene** BY E. E. Green, R. J. Wheeler, S. M. Billedeau, and H. P. Burchfiled, Gulf South Research Institute New Iberia, LA **ORDER FROM:** Pending |
| 650/2-74-069 | 1AA010 | **Instrumentation and Methodology for the Assay of Polynuclear Aromatic Hydrocarbons** Exxon Research and Engineering Company Linden, NJ **ORDER FROM:** Pending |
| 650/2-74-070 | 1AA010 | **Effects of Nozzle Design and Sampling Techniques on Aerosol Measurements** ARO Inc. Arnold Air Force Station, TN **ORDER FROM:** Pending |
| 650/2-74-071a | 1AB013 | **Improved Air Pollution Control for Kraft Recovery Boiler: Modified Recovery Boiler No. 3** Hoerner Waldorf Corporation St. Paul, MN **ORDER FROM: NTIS-PB** 237 627/AS $7.00 |
| 650/2-74-071b | 1AB013 | **Improved Air Pollution Control for a Kraft Recovery Boiler: Recovery Boiler No. 4** Hoerner Waldorf Corporation St. Paul, MN **ORDER FROM: NTIS-PB** 240 442/AS $4.75 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2-74-072 | 1AB013 | **Sasol Type Process for Gasoline, Methanol, SNG, and Low-BTU Gas from Coal** BY F. K. Chan, M. W. Kellogg Company Houston, TX **ORDER FROM: NTIS-PB** 237 670/AS $4.75 |
| 650/2-74-073 | 1AB013 | **St. Louis/Union Electric Refuse Firing Demonstration Air Pollution Test Support** Midwest Research Institute Kansas City, MO **ORDER FROM: NTIS-PB** 237 630/AS $5.25 |
| 650/2-74-074 | 1AB012 | **Influence of Fly Ash Compositional Factors on Electrical Volume Resistivity** Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 237 698/AS $3.75 |
| 650/2-74-075 | 1AB012 | **Charged Droplet Scrubbing of Submicron Particulate** Massachusetts Institute of Technology Cambridge, MA **ORDER FROM: NTIS-PB** 241 262/AS $8.50 |
| 650/2-74-076 | 1AB013 | **Coke Oven Smokeless Pushing System Design Manual** Ford Motor Company Dearborn, MI **ORDER FROM: NTIS-PB** 239 491/AS $4.25 |
| 650/2-74-077 | 1AB013 | **Lime/Limestone Scrubbing in a Pilot Dustraxtor – Key West** Engineering-Science, Inc. McLean, VA **ORDER FROM: NTIS-PB** 237 622/AS $6.25 |
| 650/2-74-078a | 1AB014 | **Field Testing: Application of Combustion Modifications to Control Pollutant Emissions from Industrial Boilers – Phase I** KVB Engineering, Inc. Tustin, CA **ORDER FROM: NTIS-PB** 238 920/AS $7.25 |
| 650/2-74-079 | 1AB012 | **Techniques for Measuring Fly Ash Resistivity** Southern Research Institute Birmingham, AL **ORDER FROM:** Pending |
| 650/2-74-080 | 1AB013 | **Statistical Concepts for Design Engineers** Oklahoma State University Stillwater, OK **ORDER FROM: NTIS-PB** 240 694/AS $6.25 |
| 650/2-74-081 | 1AB012 | **Seminar on Electrostatics and Fine Particles — September 1973** National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 236 676 $4.75 |
| 650/2-74-082 | 1AB013 | **Refinery Catalytic Cracker Reginerator $SO_x$ Control Process Survey** Monsanto Research Corporation Dayton, OH **ORDER FROM: NTIS-PB** 237 756/AS $7.50 |
| 650/2-74-082a | 1AB012 | **Dynactor Scrubber Evaluation** GCA Corporation Bedford, MA **ORDER FROM:** Pending |
| 650/2-74-083 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 650/2-74-084 | 1AB015 | **Odor Removal from Air by Adsorption on Charcoal** Kansas State University Manhattan, KS **ORDER FROM: NTIS-PB** 236 928/AS $5.25 |
| 650/2-74-085a | 1AB013 | **Control of Sulfur Dioxide Emissions from Copper Smelters: Volume I – Steam Oxidation of Pyritic Copper Concentrates** Battelle Pacific Northwest Laboratories Richland, WA **ORDER FROM: NTIS-PB** 237 748/AS $4.75 |
| 650/2-74-085b | 1AB013 | **Control of Sulfur Dioxide Emissions from Copper Smelters: Volume II – Hydrogen Sulfide Production from Copper Concentrates** Battelle Pacific Northwest Laboratories Richland, WA **ORDER FROM: NTIS-PB** 237 928/AS $5.25 |
| 650/2-74-086a | 1AB013 | **Procedures for Measurement in Stratified Gases – Volume I** Abcor, Incorporated, Walden Research Division Cambridge, MA **ORDER FROM: NTIS-PB** 241 837/AS $8.75 |
| 650/2-74-086b | 1AB013 | **Procedures for Measurement in Stratified Gases – Volume II, Appendices** Abcor, Incorporated, Walden Research Division Cambridge, MA **ORDER FROM: NTIS-PB** 241 838/AS $7.25 |
| 650/2-74-087 | 1AB015 | **Identification and Assessment of Asbestos Emissions from Incidental Sources of Asbestos** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 241 999/AS $9.50 |
| 650/2-74-088 | 1AB015 | **Assessment of Particle Control Technology for Enclosed Asbestos Sources** IIT Research Institute Chicago, IL **ORDER FROM: NTIS-PB** 239 926/AS $5.75 |
| 650/2-74-089 | 1AA010 | **Investigation of Extractive Sampling Interface Parameters** Abcor, Incorporated, Walden Research Division Cambridge, MA **ORDER FROM:** Pending |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | |
|---|---|
| 650/2-74-090 | 1AB015 **Characterization and Control of Asbestos Emissions from Open Sources** IIT Research Institute Chicago, IL **ORDER FROM: NTIS-PB** 238 925/AS $7.25 |
| 650/2-74-091 | 1AB013 **Systems Analysis Requirements for Nitrogen Oxide Control of Stationary Sources** Aerotherm/Acurex Corporation Mountain View, CA **ORDER FROM: NTIS-PB** 237 367/AS $6.25 |
| 650/2-74-092 | 1AB012 **Sodium Conditioning to Reduce Fly Ash Resistivity** Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 236 922/AS $3.25 |
| 650/2-74-093 | 1AB012 **Fine Particle Scrubber Performance Tests** A.P.T., Inc. Riverside, CA **ORDER FROM: NTIS-PB** 240 325/AS $8.50 |
| 650/2-74-094 | 1AA010 **Infrared Gas Filter Correlation Instrument for In-Situ Measurement of Gaseous Pollutants** Philco-Ford Corporation Newport Beach, CA **ORDER FROM: NTIS-PB** 239 467/AS $4.25 |
| 650/2-74-095 | 1AB015 **Fluoride Emissions from Phosphoric Acid Plant Gypsum Ponds** North Carolina State University Raleigh, NC **ORDER FROM: NTIS-PB** 241 144/AS $9.50 |
| 650/2-74-096 | 1AA002 **Effect of Fuel Additives Study** Michigan, University of Ann Arbor, MI **ORDER FROM: NTIS-PB** 240 169/AS $4.25 |
| 650/2-74-097 | 1AB015 **Vinyl Chloride – An Assessment of Emissions Control Techniques and Costs** BY B. H. Carpenter, Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 237 343/AS $4.75 |
| 650/2-74-098 | 1AB013 **Evaluation of R&D Investment Alternatives for $SO_x$ Air Pollution Control Processes** M. W. Kellogg Company Houston, TX **ORDER FROM: NTIS-PB** 238 263/AS $8.75 |
| 650/2-74-099 | 1AB013 **Environmental Considerations for Oil Shale Development** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 241 942/AS $5.75 |
| 650/2-74-100 | 1AB012 **Process Modifications for Control of Particulate Emissions from Stationary Combustion, Incineration, and Metals** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 237 422 $5.25 |
| 650/2-74-101 | 1AB015 **Atmospheric Emissions from Asphalt Roofing Processes** PEDCo-Environmental Specialists, Inc. Cincinnati, OH **ORDER FROM: NTIS-PB** 238 445/AS $6.25 |
| 650/2-74-102 | 1AB012 **Particulate Sizing Techniques for Control Device Evaluation** Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 240 670/AS $5.75 |
| 650/2-74-103 | 1AB012 **Design, Fabrication, and Installation of a Particulate Aerodynamic Test Facility** Aerotherm/Acurex Corporation Mountain View, CA **ORDER FROM:** Pending |
| 650/2-74-104 | 1AB013 **Reduction of Atmospheric Pollution by the Application of Fluidized-Bed Combustion and Regeneration of Sulfur-Containing Additives** Argonne National Laboratory Argonne, IL **ORDER FROM: NTIS-PB** 237 754/AS $5.75 |
| 650/2-74-105 | 1AA008 **Analysis of the Composition of the Atmosphere in the Los Angeles Basin** Abcor, Incorporated, Walden Research Division Cambridge, MA **ORDER FROM: NTIS-PB** 239 466/AS $4.75 |
| 650/2-74-106 | 1AB015 **System Analysis of Air Pollutant Emissions from the Chemical/ Plastics Industry** Foster D. Snell, Inc. Florham Park, NJ **ORDER FROM: NTIS-PB** 239 880/AS $8.75 |
| 650/2-74-107 | 1AB015 **Characterization of Atmospheric Emissions from Polyurethane Resin Manufacture** Midwest Research Institute Kansas City, MO **ORDER FROM: NTIS-PB** 237 420/AS $4.75 |
| 650/2-74-108 | 1AB012 **Wet Scrubber Liquid Utilization** Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 237 749/AS $5.75 |
| 650/2-74-109 | 1AB013 **Chemically Active Fluid-Bed Process for Sulphur Removal During Gasification of Heavy Fuel Oil – Second Phase** Esso Research and Engineering Company Berkshire, England **ORDER FROM: NTIS-PB** 240 632/AS $13.25 |
| 650/2-74-110 | 1AB015 **Mathematical Simulation of an Adsorber for Pollutant Removal** Kansas State University Manhattan, KS **ORDER FROM: NTIS-PB** 239 331/AS $4.75 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2–74–111 | 1AB012 | **Measurement of Sulfur Dioxide, Particulate, and Trace Elements in Copper Smelter Converter and Roaster/Reverberatory Gas Streams** Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 238 095/AS $4.75 |
| 650/2–74–112 | 1AB012 | **EPA Fine Particle Scrubber Symposium (San Diego, 5/28–30/74)** A.P.T., Inc. Riverside, CA **ORDER FROM: NTIS-PB** 239 335/AS $8.50 |
| 650/2–74–113 | 1AA010 | **Remote Sensing of Pollutants – Computerized Reduction of Long-Path Absorption Data** Wave Propagation Laboratory, NOAA/ERL Boulder, CO **ORDER FROM: NTIS-PB** 240 168/AS $7.25 |
| 650/2–74–114 | 1AB012 | **Conditioning of Fly Ash with Sulfamic Acid, Ammonium Sulfate, and Ammonium Bisulfact** Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 238 922/AS $4.25 |
| 650/2–74–115 | 1AB015 | **Trace Pollutant Emissions from the Processing of Metallic Ores** PEDCo-Environmental Specialists, Inc. Cincinnati, OH **ORDER FROM: NTIS-PB** 238 655/AS $8.75 |
| 650/2–74–116 | 1AB012 | **Changes in the Global Energy Balance** M. W. Kellogg Company Houston, TX **ORDER FROM: NTIS-PB** 238 075/AS $3.75 |
| 650/2–74–117 | 1AB012 | **Sources and Characterization of Fine Particulate Test Dusts** Monsanto Research Corporation Dayton, OH **ORDER FROM: NTIS-PB** 238 924/AS $5.25 |
| 650/2–74–118 | 1AB013 | **Symposium Proceedings: Environmental Aspects of Fuel Conversion Technology (May 1974, St. Louis, Missouri)** Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 238 304/AS $10.00 |
| 650/2–74–119a | 1AB013 | **Entrainment Separators for Scrubbers – Initial Report** A.P.T., Inc. Riverside, CA **ORDER FROM: NTIS-PB** 241 189/AS $9.25 |
| 650/2–74–120 | 1AA010 | **In-Stack Transmissometer Measurement of Particulate Opacity and Mass Concentration** Philco-Ford Corporation Newport Beach, CA **ORDER FROM: NTIS-PB** 239 864/AS $5.25 |
| 650/2–74–121 | 1AA010 | **Development of Method for Carcinogenic Vapor Analysis in Ambient Atmospheres** Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 239 770/AS $6.25 |
| 650/2–74–122 | 1AB015 | **Trace Pollutant Emissions from the Processing of Non-Metallic Ores** PEDCo-Environmental Specialists, Inc. Cincinnati, OH **ORDER FROM: NTIS-PB** 240 117/AS $8.75 |
| 650/2–74–123 | 1AB013 | **Boiler Modification Cost Survey for Sulfur Oxides Control by Fuel Substitution** Aerotherm/Acurex Corporation Mountain View, CA **ORDER FROM: NTIS-PB** 239 455/AS $5.25 |
| 650/2–74–124 | 1AA010 | **Development of Sampling Method for Total Atmospheric Selenium** Southern Research Institute Birmingham, AL **ORDER FROM:** PB No. Pending |
| 650/2–74–125 | 1AB013 | **Pollutant Analysis Cost Survey** U.S. Department of Commerce Washington, DC **ORDER FROM:** Pending |
| 650/2–74–126a | 1AB013 | **Symposium on Flue Gas Desulfurization – Atlanta, November 1974 Volume I** Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/2–74–126b | 1AB013 | **Proceedings: Symposium on Flue Gas Desulfurization – Atlanta, November 1974, Volume II** Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/2–74–127 | 1AB013 | **Evaluation of Sulfur Dioxide Emission Control Options for Iowa Power Boilers** M. W. Kellogg Company Houston, TX **ORDER FROM: NTIS-PB** 239 496/AS $10.00 |
| 650/2–74–128 | 1AA010 | **Measurement of the Opacity and Mass Concentration of Particulate Emissions by Transmissometry** Chemistry and Physics Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 241 251/AS $3.75 |
| 650/2–74–129 | 1AB012 | **Evaluation of Aeronetic Two-Phase Jet Scrubber** Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 239 422/AS $3.75 |
| 650/2–74–129a | 1AB012 | **Evaluation of Centrifield Scrubber** Southern Research Institute Birmingham, AL **ORDER FROM:** Pending |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2-74-130 | 1AB013 | **Production of Low-Sulfur Gasoline** M. W. Kellogg Company Houston, TX **ORDER FROM:** Pending |
| 650/2-74-131 | 1AB013 | **Determination of Hazardous Elements in Smelter-Produced Sulfuric Acid** Monsanto Research Corporation Dayton, OH **ORDER FROM: NTIS-PB** 240 343/AS $4.25 |
| 650/2-74-132 | 1AB012 | **Electrostatic Precipitator Performance Model** Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 238 923/AS $7.00 |
| 650/2-74-133 | 1AA010 | **Development of a Prototype Nitrate Detector** Abcor, Incorporated, Walden Research Division Cambridge, MA **ORDER FROM:** Pending |
| 650/2-75-001a | 1AB014 | **Assessment of Catalysts for Control of NOx from Stationary Power Plants, Phase I, Volume I – Final Report** TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 239 745/AS $7.25 |
| 650/2-75-001b | 1AB014 | **Assessment of Catalysts for Control of NOx from Stationary Power Plants, Phase I, Volume II – Data Bank Citation Indices** TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 239 746/AS $8.50 |
| 650/2-75-002 | 1AB012 | **Influence of Fiber Characteristics on Particulate Filtration** Textile Research Institute Princeton, NJ **ORDER FROM: NTIS-PB** 239 997/AS $4.25 |
| 650/2-75-003 | 1AA010 | **Seminar Summary: Sampling and Analysis of the Various Forms of Atmospheric Lead** BY A. Hoyt, Chemistry and Physics Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 240 620/AS $3.25 |
| 650/2-75-004 | 1AA010 | **Quantitative Analysis of Airborne Asbestos by X-Ray Diffraction: Final Report on Feasibility Study** Naval Research Laboratory Washington, DC **ORDER FROM:** Pending |
| 650/2-75-005a | 1AA003 | **Limited $SO_2$ and NOx Measurements in St. Louis, 1974: Volume I – Plume Tracking by Correlation Spectroscopy** Environmental Measurements, Inc. San Francisco, CA **ORDER FROM:** Pending |
| 650/2-75-005b | 1AA003 | **Limited $SO_2$ and NOx Measurements in St. Louis, 1974: Volume II, Longline Ambient $SO_2$ Monitor and Variability of $SO_2$ and NOx** Environmental Measurements, Inc. San Francisco, CA **ORDER FROM:** Pending |
| 650/2-75-006 | 1AB013 | **Theoretical and Experimental Study of the Lime/Limestone Wet Scrubbing Process** Radian Corporation Austin, TX **ORDER FROM:** Pending |
| 650/2-75-007 | 1AA010 | **Development of Sampling Procedures for Polycyclic Organic Matter and Polychlorinated Biphenyls** Langston Laboratories, Inc. Leawood, KS **ORDER FROM:** Pending |
| 650/2-75-008 | 1AA010 | **In-Stack Transmissometer Evaluation and Application to Particulate Opacity Measurement** Fecker Systems, Owens-Illinois, Inc. Pittsburgh, PA **ORDER FROM:** Pending |
| 650/2-75-009 | 1AB012 | **Fabric Filter Cleaning Studies** GCA Corporation Bedford, MA **ORDER FROM: NTIS-PB** 240 372/AS $10.50 |
| 650/2-75-010a | 1AB013 | **Sulfur Oxide Throwaway Sludge Evaluation Panel (SOTSEP), Volume I: Final Report – Executive Summary** Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/2-75-010b | 1AB013 | **Sulfur Oxide Throwaway Sludge Evaluation Panel (SOTSEP), Volume II: Final Report – Technical Discussion** Control Systems Laboratory, EPA Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/2-75-011 | 1AB013 | **Sulfur and Nitrogen Balances in the Solvent Refined Coal Process** U.S. Department of the Interior Washington, DC **ORDER FROM:** Pending |
| 650/2-75-012 | 1AB014 | **Analysis of Test Data for NOx Control in Gas and Oil-Fired Utility Boilers** Aerospace Corporation El Segundo, CA **ORDER FROM: NTIS-PB** 241 918/AS $8.50 |
| 650/2-75-013a | 1AA010 | **Development of a Prototype Sulfuric Acid Monitor** National Research Corporation Billerica, MA **ORDER FROM:** Pending |
| 650/2-75-014 | 1AA002 | **Effect of Gasoline Additives on Gaseous Emissions** U.S. Bureau of Mines Bartlesville, OK **ORDER FROM:** Pending |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/2-75-015 | 1AA010 | **Fabrication and Installation of the Stationary Source Simulator** Aerotherm/Acurex Corporation Mountain View, CA **ORDER FROM:** Pending |
| 650/2-75-016 | 1AB012 | **Symposium on Electrostatic Precipitators for the Control of Fine Particles** Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 240 440/AS $12.00 |
| 650/2-75-017 | 1AB014 | **Identification and Characterization of the Use of Mixed Conventional and Waste Fuels** M. W. Kellogg Company Houston, TX **ORDER FROM: NTIS-PB** 241 821/AS $4.25 |
| 650/2-75-018 | 1AB012 | **Design, Development, and Field Test of a Droplet Measuring Device** KLD Associates, Inc. Huntington, NY **ORDER FROM:** Pending |
| 650/2-75-019a | 1AB015 | **Source Assessment Prioritization of Air Pollution from Industrial Surface Coating Operations** Monsanto Research Corporation Dayton, OH **ORDER FROM:** Pending |
| 650/2-75-020 | 1AB013 | **Continuous Measurement of Total Gas Flowrate from Stationary Sources** TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 241 894/AS $8.50 |
| 650/2-75-021 | 1AB013 | **Distributions of Industrial and Commercial-Institution External Combustion Boilers** Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 241 195/AS $11.50 |
| 650/2-75-022 | 1AB012 | **Andersen Filter Substrate Weight Loss** Southern Research Institute Birmingham, AL **ORDER FROM: NTIS-PB** 240 720/AS $3.75 |
| 650/2-75-023 | 1AB014 | **Evaluation of Prechamber Spark Ignition Engine Concepts** Aerospace Corporation El Segundo, CA **ORDER FROM: NTIS-PB** 241 780/AS $7.50 |
| 650/2-75-024a | 1AB012 | **Pentapure Impinger Evaluation** GCA Corporation Bedford, MA **ORDER FROM: NTIS-PB** 240 397/AS $4.25 |
| 650/2-75-025 | 1AA010 | **Methodology for Assignment of a Hydrocarbon Photochemical Reactivity Index for Emissions From Mobile Sources** Chemistry and Physics Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 240 721/AS $3.75 |
| 650/2-75-026a | 1AB015 | **Testing of a Molecular Sieve Used to Control Mercury Emission From A Chlor-Alkali Plant, Volume I** Engineering-Science, Inc. McLean, VA **ORDER FROM:** Pending |
| 650/2-75-026b | 1AB015 | **Testing of a Molecular Sieve Used to Control Mercury Emission From A Chlor-Alkali Plant, Volume II – Appendices** Engineering-Science, Inc. McLean, VA **ORDER FROM:** Pending |
| 650/2-75-027a | 1AB013 | **Fluidized Bed Combustion Process Evaluation (Phase I – Residual Oil Gasification/Desulfurization Demonstration at Atmospheric Pressure) Volume I – Summary** Westinghouse Research Laboratories Pittsburgh, PA **ORDER FROM: NTIS-PB** 241 834/AS $5.75 |
| 650/2-75-027b | 1AB013 | **Fluidized Bed Combustion Process Evaluation (Phase I – Residual Oil Gasification/Desulfurization Demonstration at Atmospheric Pressure) Volume II – Appendices** Westinghouse Research Laboratories Pittsburgh, PA **ORDER FROM: NTIS-PB** 241 835/AS $10.50 |
| 650/2-75-028 | 1AA010 | **Improvement of Instrumentation and Methodology for Collection and Analysis of Mercury** Geomet, Inc. Pomona, CA **ORDER FROM:** Pending |
| 650/2-75-029 | 1AA010 | **Development of Scanning Electron Microscopy for Measurement of Airborne Asbestos Concentrations** Franklin Institute Research Laboratories Philadelphia, PA **ORDER FROM:** Pending |
| 650/2-75-030 | 1AB013 | **Sulfur Compound Emissions of the Petroleum Production Industry** M. W. Kellogg Company Houston, TX **ORDER FROM: NTIS-PB** 241 261/AS $6.25 |
| 650/2-75-031 | 1AB013 | **Scale Control in Limestone Wet Scrubbing Systems** Arthur D. Little, Inc. Cambridge, MA **ORDER FROM:** Pending |
| 650/2-75-032a | 1AB013 | **Energy Consumption: The Chemical Industry** Dow Chemical Company Freeport, TX **ORDER FROM: NTIS-PB** 241 927/AS $4.25 |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | |
|---|---|
| 650/2-75-032b | 1AB013 **Energy Consumption: The Primary Metals and Petroleum Industries** Dow Chemical Company Freeport, TX **ORDER FROM:** Pending |
| 650/2-75-032c | 1AB013 **Energy Consumption: Paper, Stone/Clay/Glass/Concrete, and Food Industries** Dow Chemical Company Freeport, TX **ORDER FROM: NTIS-PB** 241 926/AS $4.25 |
| 650/2-75-033 | 1AB012 **Particulate Collection Efficiency Measurements on a Wet Electrostatic Precipitator** M. W. Kellogg Company Houston, TX **ORDER FROM:** Pending |
| 650/2-75-034 | 1AB013 **Fuels Technology: A State-of-the-Art Review** Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Pending |
| 650/2-75-035 | 1AB014 **Application of Automatic Data Processing Technology to Laboratory Problems** Aerotherm Acurex Corporation Mountain View, CA **ORDER FROM:** Pending |
| 650/2-75-036 | 1AA010 **Asbestos Fiber Atlas** California Department of Health, State of Berkeley, CA **ORDER FROM:** Pending |
| 650/2-75-037 | 1AB012 **Mathematical Model of Electrostatic Precipitation** Southern Research Institute Birmingham, AL **ORDER FROM:** Pending |
| 650/2-75-038 | 1AB015 **Potentially Hazardous Emissions From The Extraction and Processing of Coal and Oil** BY G. Cavanaugh, C. E. Burklin, and J. C. Dickerson, Radian Corporation Austin, TX BY H. E. Lebowitz, S. S. Tam, G. R. Smithson Jr., H. Nack, and J. H. Oxley, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 241 803/AS $6.25 |
| 650/2-75-039 | 1AA010 **Field Testing and Evaluation of Methods for Measuring Visibility** Northwest Environmental Technology Laboratory, Inc. Bellevue, WA **ORDER FROM:** Pending |
| 650/2-75-040 | 1AB013 **Direct Use of Coal in a Fuel Cell: Feasibility Investigation** Stanford Research Institute Menlo Park, CA **ORDER FROM:** Pending |
| 650/2-75-041 | 1AA010 **Infrared Sensor for the Remote Monitoring of $SO_2$** SAI, Inc. LaJolla, CA **ORDER FROM:** Pending |
| 650/2-75-042 | 1AB015 **Demonstration of Reduced Hydrocarbon Emissions from Gasoline Loading Terminals** Amoco Oil Company Naperville, IL **ORDER FROM:** Pending |
| 650/2-75-043 | 1AA010 **Investigation of Particulate Matter Monitoring Using Contact Electrification** California State College Turlock, CA **ORDER FROM:** Pending |
| 650/2-75-044 | 1AB013 **St. Louis Refuse Processing Plant Equipment, Facility, and Environmental Evaluations** Midwest Research Institute Kansas City, MO **ORDER FROM:** Pending |
| 650/2-75-045 | 1AB013 **Stone & Webster/Ionics $SO_2$ Removal and Recovery Process: Phase I, Final Report** Wisconsin Electric Power Company Milwaukee, WI **ORDER FROM:** Pending |
| 650/2-75-046 | 1AB013 **Evaluation of Low-Sulfur Western Coal Characteristics, Utilization, and Combustion Experience** Monsanto Research Corporation Dayton, OH **ORDER FROM:** Pending |
| 650/2-75-047 | 1AB013 **EPA Alkali Scrubbing Test Facility: Summary of Testing Through October 1974** Bechtel Corporation San Francisco, CA **ORDER FROM:** Pending |
| 650/2-75-048 | 1AA003 **Fabrication of Monitoring System for Determining Mass and Composition of Aerosol as a Function of Time** Lawrence Berkeley Laboratory Berkeley, CA **ORDER FROM:** Pending |
| 650/2-75-049 | 1AA001 **Cadmium in the Environment – III A Toxicological and Epidemiological Appraisal** Karolinska Institute Stockholm, Sweden **ORDER FROM:** Pending |
| 650/2-75-050 | 1AA010 **Development of Selective Hydrocarbon Sampling System and Field Evaluation with Conventional System** Analytical Research Laboratories, Inc. Monrovia, CA **ORDER FROM:** Pending |
| 650/3-73-001 | 1AA009 **User's Manual for the APRAC-1A Urban Diffusion Model Computer Program** BY R. L. Mancuso, and F. L. Ludwig, Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 213 091 $5.25 |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | |
|---|---|
| 650/3-73-002 | 1AA008 **Determination of the Formation Mechanisms and Composition of Photochemical Aerosols** BY W. C. Kocmond, D. B. Kittelson, J. Y. Tang, and K. L. Demerjian, Calspan Corporation Buffalo, NY **ORDER FROM: NTIS-PB** 230 987 $5.25 |
| 650/3-74-001 | 1HA095 **Bibliography of the Cat** National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 229 869/AS $8.25 |
| 650/3-74-002 | 1AA008 **Haze Formation: It's Nature and Origin – 1973** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 231 535/AS $6.25 |
| 650/3-74-003 | 1AA009 **Wind Tunnel Tests of Negatively Buoyant Plumes** Colorado State University Fort Collins, CO **ORDER FROM: NTIS-PB** 231 590 $5.25 |
| 650/3-74-004a | 1AA008 **Study of Factors Affecting Reactions in Environmental Chambers Final Report on Phase II** Lockheed Missiles and Space Company, Inc. Sunnyvale, CA **ORDER FROM: NTIS-PB** 236 390/AS $4.00 |
| 650/3-74-005 | 1AA009 **Precipitation Scavenging of Inorganic Pollutants from Metropolitan Sources** Battelle Pacific Northwest Laboratories Richland, WA **ORDER FROM: NTIS-PB** 237 374/AS $5.75 |
| 650/3-74-006 | 1AA008 **Structure and Reactivity of Adsorbed Oxides of Sulfur** BY J. H. Lunsford, Texas A&M University College Station, TX **ORDER FROM:** Pending |
| 650/3-74-007 | 1AA008 **Role of Solid-Gas Interactions in Air Pollution** Aerospace Corporation El Segundo, CA **ORDER FROM:** Pending |
| 650/3-74-008 | 1AA006 **Effects of Air Pollutants on Textile Fibers and Dyes** BY J. B. Upham, Chemistry and Physics Laboratory, EPA Research Triangle Park, NC BY V. S. Salvin, North Carolina, University of Greensboro, NC **ORDER FROM: NTIS-PB** 241 507/AS $4.75 |
| 650/3-74-009 | 1AA008 **Air Pollution Effects on Catastrophic Failure of Metals** BY J. Gerhard, and F. H. Haynie, Chemistry and Physics Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 238 290/AS $3.75 |
| 650/3-74-010 | 1AA008 **Proceedings of the Solvent Reactivity Conference** Chemistry and Physics Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 238 296/AS $3.75 |
| 650/3-74-011 | 1AA008 **Chemical Characterization of Model Aerosols** BY W. Schwartz, Battelle Memorial Institute Columbus, OH **ORDER FROM: NTIS-PB** 238 557/AS $5.75 |
| 650/3-75-001 | 1AA010 **Environmental Exposure System for Studying Air Pollution Damage to Materials** Chemistry and Physics Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 240 615/AS $3.75 |
| 650/3-75-002 | 1AA008 **Exploratory Study of Factors Affecting Aerosol Formation** Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Pending |
| 650/3-75-003 | 1AA009 **Travels of Airborne Pollen** New York, State University of Albany, NY **ORDER FROM:** Pending |
| 650/3-75-004 | 1AA008 **Formation of Aerosols in a Photochemical Fast Row Reactor** Rockwell International Thousand Oaks, CA **ORDER FROM:** Pending |
| 650/4-73-001 | 1AA009 **Mesoscale Windfield Analysis of Los Angeles Basin** BY G. E. Anderson, Center for the Environment and Man, Inc. Hartford, CT **ORDER FROM: NTIS-PB** 231 832/AS $5.25 |
| 650/4-73-002 | 1AA009 **Lidar Studies of Stack Plumes in Rural and Urban Environments** BY W. B. Johnson, R. J. Allen, and W. E. Evans, Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 227 347 $5.25 |
| 650/4-73-003 | 1HA326 **Determination of Coronal Ozone Production by High Voltage Power Transmission Lines** BY F. J. Whitmore, and R. L. Durfre, Versar, Inc. Springfield, VA **ORDER FROM: NTIS-PB** 229 994/AS $5.75 |
| 650/4-74-001 | 1AA009 **Application of Repro-Modeling to the Analysis of a Photochemical Air Pollution Model** BY A. Horowitz, W. S. Meisel, and D. C. Collins, Technology Service Corporation Santa Monica, CA **ORDER FROM: NTIS-PB** 231 667/AS $5.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/4-74-002 | 1AA009 | **Meteorological Episodes of Slowest Dilution in Contiguous United States** BY B. Ryans, National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 229 588/AS $7.50 |
| 650/4-74-003 | 1AA009 | **Development of Modeling Technique for Photochemical Air Pollution** Systems, Science and Software La Jolla, CA **ORDER FROM: NTIS-PB** 237 692/AS $4.75 |
| 650/4-74-004 | 1AA008 | **Molecular Modulation Spectrometry for Observation of Free Radicals** BY H. S. Johnston, California, University of Berkeley, CA **ORDER FROM:** Pending |
| 650/4-74-005a | 1HA327 | **Guidelines for Development of a Quality Assurance Program: Volume I-Determination of Stack Gas Velocity and Volumetric Flow Rate (Type-S Pitot Tube)** BY F. Smith, D. E. Wagoner, and A. C. Nelson Jr., Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 232 437/AS $4.25 |
| 650/4-74-005b | 1HA327 | **Guidelines for Development of a Quality Assurance Program: Volume II – Gas Analysis for Carbon Dioxide, Excess Air, and Dry Molecular Weight** Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 235 712/AS $3.75 |
| 650/4-74-005c | 1HA327 | **Guidelines for Development of a Quality Assurance Program: Volume III – Determination of Moisture in Stack Gases** Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 240 354/AS $4.25 |
| 650/4-74-005d | 1HA327 | **Guidelines for Development of a Quality Assurance Program: Volume IV – Determination of Particulate Emissions from Stationary Sources** Research Triangle Institute Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/4-74-005h | 1HA327 | **Guidelines for Development of a Quality Assurance Program: Volume VIII – Determination of CO Emissions from Stationary Sources by NDIR Spectrometry** Research Triangle Institute Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/4-74-005m | 1HA327 | **Guidelines for Development of a Quality Assurance Program: Volume XIII – Test for Lead in Gasoline by Atomic Absorption Spectrometry** Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 241 264/AS $4.25 |
| 650/4-74-005L | 1HA327 | **Guidelines for Development of a Quality Assurance Program: Volume XII – Determination of Phosphorus in Gasoline** Research Triangle Institute Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/4-74-006 | 1AA009 | **Methodology for Treating Large Localized Emissions of Reactive Pollutants** JRB Associates, Inc. La Jolla, CA **ORDER FROM:** Pending |
| 650/4-74-007 | 1AA003 | **Determination of Energetic Characteristics of Urban-Rural Surfaces in the Greater St. Louis Area** Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 237 704/AS $5.25 |
| 650/4-74-008 | 1AA009 | **User's Guide for Hiway, A Highway Air Pollution** BY E. Caldwell, Meteorology Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 239 944/AS $4.25 |
| 650/4-74-009 | 1AA008 | **Environmental Chamber Studies of Atmospheric Aerosols** Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Pending |
| 650/4-74-010 | 1AA010 | **Synthesis of Trifluoromethylsulfur Pentafluoride ($CF_3SF_5$)** Armageddon Chemical Company Durham, NC **ORDER FROM: NTIS-PB** 233 149/AS $3.25 |
| 650/4-74-011 | 1AA008 | **Mathematical Simulation of Atmospheric Photochemical Reactions: Model Development, Validation, and Application** Systems Applications, Inc. San Rafael, CA **ORDER FROM: NTIS-PB** 233 049/AS $6.25 |
| 650/4-74-012 | 1AA005 | **Comparability of Nine Methods for Monitoring $NO_2$ in Ambient** Air Research Triangle Institute Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/4-74-013 | 1HA327 | **Collaborative Study of EPA Methods 5,6, and 7 in Fossil Fuel-Fired Steam Generators** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 237 695/AS $3.75 |
| 650/4-74-014 | 1HA327 | **Guide for the Evaluation of Atmospheric Analyzers** Air and Industrial Hygiene Laboratory, California State Department of Health Berkeley, CA **ORDER FROM: NTIS-PB** 233 048/AS $7.50 |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | |
|---|---|
| 650/4-74-015 | 1HA327 **Survey of Manual Methods of Measurements of Asbestos, Beryllium, Lead, Cadmium, Selenium, and Mercury in Stationary Source Emissions** Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 234 326/AS $6.25 |
| 650/4-74-016 | 1HA327 **Concepts for Development of Field Usable Test Atmosphere Generating Devices** Research Triangle Institute Research Triangle Park, NC **ORDER FROM: NTIS-PB** 235 774/AS $5.00 |
| 650/4-74-017 | 1AA008 **Design of the EPA Semi-Trailer Mobile Air Pollution Laboratory** Thermo-Systems, Inc. St. Paul, MN **ORDER FROM:** Pending |
| 650/4-74-018 | 1HA327 **Guidelines for Determining Performance Characteristics of Automated Methods for Measuring Nitrogen Dioxide and Hydrocarbons, Corrected for Methane in Ambient Air** Quality Assurance and Environmental Monitoring Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 238 092/AS $3.75 |
| 650/4-74-019a | 1HA327 **Collaborative Testing Methods for Measurements of $NO_2$ in Ambient Air Volume I – Report of Testing** Midwest Research Institute Kansas City, MO **ORDER FROM:** Pending |
| 650/4-74-020 | 1HA327 **Development of Technical Specifications for Standard Gas-Diluent Mixtures for Use in Measurement of Mobile Source Emissions** Scott Research Laboratories, Inc. Plumsteadville, PA **ORDER FROM:** Pending |
| 650/4-74-021 | 1HA327 **Collaborative Study of Method for the Determination of Particulate Matter Emissions From Stationary Sources (Fossil Fuel-Fired Steam Generators)** BY H. F. Hamil, and R. E. Thomas, Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 234 150/AS $5.00 |
| 650/4-74-022 | 1HA327 **Collaborative Study of Method for the Determination of Particulate Matter Emissions from Stationary Sources (Municipal Incinerators)** BY H. F. Hamil, and R. E. Thomas, Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 234 151/AS $5.00 |
| 650/4-74-023 | 1HA327 **Collaborative Study of Method 104 – Reference Method for Determination of Beryllium Emission from Stationary Sources** Midwest Research Institute Kansas City, MO **ORDER FROM:** Pending |
| 650/4-74-024 | 1HA327 **Collaborative Study of Method for the Determination of Sulfur Dioxide Emissions From Stationary Sources (Fossil Fuel-Fired Steam Generators)** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 238 293/AS $4.25 |
| 650/4-74-025 | 1HA327 **Collaborative Study of Method for the Determination of Nitrogen Oxide Emissions from Stationary Sources (Fossil Fuel-Fired Steam Generators)** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 238 555/AS $5.25 |
| 650/4-74-026 | 1HA327 **Collaborative Study of Method for Stack Gas Analysis and Determination of Moisture Fraction with Use of Method 5** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 236 929/AS $3.75 |
| 650/4-74-027 | 1HA327 **Collaborative Study of Reference Method for Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method) (24-hour Sampling)** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 239 731/AS $5.25 |
| 650/4-74-028 | 1HA327 **Collaborative Study of Method for the Determination of Nitrogen Oxide Emissions from Stationary Sources (Nitric Acid Plants)** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 236 930/AS $3.75 |
| 650/4-74-029 | 1HA327 **Collaborative Study of Method for the Determination of Particulate Emissions from Stationary Sources (Portland Cement Plants)** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 237 346/AS $4.25 |
| 650/4-74-030 | 1AA003 **Development of Air Particulate Monitoring Systems** Lawrence Berkeley Laboratories Berkeley, CA **ORDER FROM: NTIS-PB** 239 690/AS $4.25 |
| 650/4-74-031 | 1HA327 **Evaluation of the Triethanolamine Procedure for the Determination of Nitrogen Dioxide in Ambient Air** National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 237 348/AS $3.75 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 650/4-74-032 | 1AA009 | **Sources and Natural Removal Processes for Some Atmospheric Pollutants** Pennsylvania State University University Park, PA **ORDER FROM: NTIS-PB** 237 168/AS $5.75 |
| 650/4-74-033 | 1HA327 | **Collaborative Study of Method for Determination of Stack Gas Velocity and Volumetric Flow Rate in Conjunction with EPA Method 5** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 240 342/AS $3.75 |
| 650/4-74-034 | 1AA008 | **Aerosol Formation from Gas-Phase Reactions of Ozone and Olefin in the Presence of Sulfur Dioxide** National Environmental Research Center, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 237 345/AS $7.50 |
| 650/4-74-035 | 1AA009 | **Invariant Modeling of Turbulence and Diffusion in the Planetary Boundary Layer** Princeton, Incorporated, Aeronautical Research Associates Princeton, NJ **ORDER FROM: NTIS-PB** 239 323/AS $5.25 |
| 650/4-74-036 | 1AA003 | **$NO_2$ Actinometer for Field Use** Philco-Ford Corporation Newport Beach, CA **ORDER FROM: NTIS-PB** 237 745/AS $4.25 |
| 650/4-74-037 | 1AA008 | **Atmospheric Measurement of Photochemical Smog Reactions – A Preliminary Analysis** Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 210 422/AS $4.25 |
| 650/4-74-038 | 1AA009 | **Proceedings of Symposium on Statistical Aspects of Air Quality** North Carolina, University of Chapel Hill, NC **ORDER FROM: NTIS-PB** 240 214/AS $8.50 |
| 650/4-74-039 | 1HA327 | **Laboratory and Field Evaluations of EPA Methods 2, 6 and 7** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 238 267/AS $4.25 |
| 650/4-74-040 | 1AA008 | **Mathematical Simulation of Smog Chamber Photo-Chemical Experiments** Systems Applications, Inc. San Rafael, CA **ORDER FROM: NTIS-PB** 238 094/AS $7.00 |
| 650/4-74-041 | 1AA009 | **Diffusion in Turbulent Surface Layer and the Development of an Atmospheric Wind Tunnel** Notre Dame, University of Notre Dame, IN **ORDER FROM:** Pending |
| 650/4-74-042 | 1HA326 | **Study of Indoor Air Quality** Research Corporation of New England Wethersfield, CT **ORDER FROM: NTIS-PB** 238 556/AS $8.75 |
| 650/4-74-043 | 1AA009 | **Highway Air Pollution Measurement Program Using Sulfur Hexafluoride Tracer Gas** Environmental Systems Laboratory, Inc. Sunnyvale, CA **ORDER FROM:** Pending |
| 650/4-74-044 | 1AA009 | **Laboratory and Numerical Simulation of Plume Dispersion in Stably Stratified Flow Over Complex Terrain** Flow Research, Inc. Kent, WA **ORDER FROM:** Pending |
| 650/4-74-045a | 1AA009 | **Select Research Group in Air Pollution Meteorology, Second Annual Progress Report Volume I** Pennsylvania State University, Department of Meteorology and Center for Air, Environmental Studies University Park, PA **ORDER FROM: NTIS-PB** 241 390/AS $10.25 |
| 650/4-74-045b | 1AA009 | **Select Research Group in Air Pollution Meteorology, Second Annual Progress Report Volume II** Pennsylvania State University, Department of Meteorology and Center for Air, Environmental Studies University Park, PA **ORDER FROM: NTIS-PB** 241 391/AS $10.50 Three Volume Set – PB 241 389/AS $20.00 |
| 650/4-74-046 | 1HA327 | **Collaborative Test of the TGS-ANSA Method for Measurement of Nitrogen Dioxide in Ambient Air** Midwest Research Institute Kansas City, MO **ORDER FROM:** Pending |
| 650/4-74-047 | 1HA327 | **Evaluation of TGS-ANSA Procedure for Determination of Nitrogen Dioxide in Ambient Air** Quality Assurance and Environmental Monitoring Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 238 097 $4.25 |
| 650/4-74-048 | 1HA327 | **Evaluation of the Arsenite Procedure for the Determination of Nitrogen Dioxide in Ambient Air** Quality Assurance and Environmental Monitoring Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 239 727/AS $3.75 |
| 650/4-74-049 | 1AA009 | **Model Verification – Aircraft Emissions Impact on Air Quality** Geomet, Inc. Gaithersburg, MD **ORDER FROM:** Pending |

## BIBLIOGRAPHIC SECTION

| REPORT NO. | |
|---|---|
| 650/4-74-050 | 1AA003 **Development of Sampling Devices for Gaseous Atmospheric Tracers** Analytical Research Laboratories, Inc. Monrovia, CA **ORDER FROM: NTIS-PB** 238 921 $4.25 |
| 650/4-74-051 | 1AA003 **Feasibility of Metrac System for Regional Air Pollution Study** Control Data Corporation Minneapolis, MN **ORDER FROM:** Pending |
| 650/4-74-052 | 1AA008 **Laboratory Analyses of Atmospheric Hydrocarbon – California South Coast Air Basin (Los Angeles Air Quality Control Region) August – November 1973** California Air Resources Board, State of El Monte, CA **ORDER FROM:** Pending |
| 650/4-75-001 | 1HA327 **Collaborative Study of Method 10 – Reference Method for Determination of Carbon Monoxide Emissions from Stationary Sources – Report of Testing** Midwest Research Institute Kansas City, MO **ORDER FROM: NTIS-PB** 241 284/AS $4.75 |
| 650/4-75-002 | 1AA002 **Comprehensive Technical Report on all Atmospheric Contaminants Associated with Photochemical Air Pollution** System Development Corporation Santa Monica, CA **ORDER FROM: NTIS-PB** 239 510/AS $12.25 |
| 650/4-75-003 | 1HA327 **Collaborative Study of Method for the Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources** Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS-PB** 240 752/AS $4.25 |
| 650/4-75-004 | 1AA009 **Studies of Pollutant Concentration Frequency Distributions** Meteorology Laboratory, EPA Research Triangle Park, NC **ORDER FROM:** Pending |
| 650/4-75-005 | 1AA009 **Optimization of Air Pollution Measurement Locations** Kaman Sciences Corporation Colorado Springs, CO **ORDER FROM:** Pending |
| 650/4-75-006 | 1AA008 **Spectroscopic Study of California Smog** Chemistry and Physics Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 241 022/AS $4.25 |
| 650/4-75-007 | 1HA327 **Summary Report: Workshop on Ozone Measurement by the Potassium Iodide Method** Quality Assurance and Environmental Monitoring Laboratory, EPA Research Triangle Park, NC **ORDER FROM: NTIS-PB** 240 939/AS $3.75 |
| 650/4-75-008 | 1HA327 **Survey of Users of the EPA – Reference Method for Measurement of Non-Methane Hydrocarbons in Ambient Air** Scott Environmental Technology Plumsteadville, PA **ORDER FROM:** Pending |
| 650/4-75-009 | 1HA327 **Evaluation and Collaborative Study of Method for Visual Determination of Opacity of Emissions from Stationary Sources** Southwest Research Institute San Antonio, TX **ORDER FROM:** Pending |
| 650/4-75-010 | 1AA009 **Statistical Questions Relating to the Validation of Air Quality Simulation Models** BY G. W. Brier, Brier, Glenn W., Consultant Fort Collins, CO **ORDER FROM: NTIS-PB** 241 866/AS $3.25 |
| 650/4-75-011 | 1HA327 **Collaborative Test of the Continuous Calori-Metric Method for Measurement of Nitrogen Dioxide in Ambient Air** Midwest Research Institute Kansas City, MO **ORDER FROM:** Pending |
| 650/4-75-012 | 1AA009 **Relationship Between Circumsolar Sky Brightness and Atmospheric Aerosols** Alaska, University of Fairbanks, AK **ORDER FROM: NTIS-PB** 241 806/AS $5.25 |
| 650/5-73-001 | 1AA005 **Study of the Social and Economic Impact of Odors – Phase III** Copley International Corporation La Jolla, CA **ORDER FROM: NTIS-PB** 223 589/AS $7.50 |
| 650/5-73-002 | 1AA004 **Assessment of Economic Impact of Air Pollutants on Vegetation in the United States, 1969 and 1971** BY H. M. Benedict, C. J. Miller, and J. S. Smith, Stanford Research Institute Menlo Park, CA **ORDER FROM: NTIS-PB** 224 818 $4.25 |
| 650/9-75-001a | 1AA001 **World's Air Quality Management Standards: Volume 1 – The Air Quality Management Standards of the World, Including United States Federal Standards** North Carolina, University of Chapel Hill, NC **ORDER FROM: NTIS-PB** 241 875/AS $10.50 |
| 650/9-75-001b | 1AA001 **World's Air Quality Management Standards: Volume 11 – The Air Quality Management Standards of the United States** North Carolina, University of Chapel Hill, NC **ORDER FROM: NTIS-PB** 241 876/AS $10.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 660/2-73-001 | 1BA032 | **Plume Temperature Measurements of Shallow Submerged Model Discharges With Current** BY L. Winiarski, and J. Chasse, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM: NTIS-PB** 223 014 $4.25 |
| 660/2-73-002 | 1BB045 | **Nitrate and Nitrite Volatilization By Microorganisms in Laboratory Experiments** BY J. M. Balloy, Pennsylvania State University University Park, PA **ORDER FROM: GPO-**EP1.23/2:660/2-73-002 $1.00 **NTIS-PB** 224 467/AS |
| 660/2-73-003 | 1BA032 | **Statistical Prediction of Equilibrium Temperature From Standard Meteorological Data Bases** BY C. M. Hogan, L. C. Patmore, and H. Seidman, Environmental Systems Laboratory, Inc. Sunnyvale, CA **ORDER FROM: GPO-**EP1.23/2:660/2-73-003 $2.55 **NTIS-PB** 226 874/AS |
| 660/2-73-004 | 1BB036 | **Nomographs for Thermal Pollution Control Systems** BY C. Jedlicka, Hittman Associates, Inc. Columbia, MD **ORDER FROM: GPO-**EP1.23/2:660/2-73-004 $1.80 **NTIS-PB** 228 582 |
| 660/2-73-005 | 1BB044 | **Batch Disinfection of Treated Wastewater With Chlorine at Less Than 1 Degree C** BY R. C. Gordon, and C. V. Davenport, Arctic Environmental Research Laboratory, EPA Fairbanks, AK **ORDER FROM: GPO-**EP1.23/2:660/2-73-005 $0.65 **NTIS-PB** 228 092 |
| 660/2-73-006a | 1BB045 | **Wastewater Treatment and Reuse By Land Application, Volume I – Summary** BY C. E. Pound, BY R. W. Crites, and Metcalf and Eddy, Inc. Palo Alto, CA **ORDER FROM: GPO-**EP1.23/2:660/2-73-006a $1.10 **NTIS-PB** 225 940 |
| 660/2-73-006b | 1BB045 | **Wastewater Treatment and Reuse By Land Application, Volume II – Summary** BY C. E. Pound, and R. W. Crites, Metcalf and Eddy, Inc., Palo Alto, CA **ORDER FROM: GPO-**EP1.23/2:660/2-73-006b $2.40 **NTIS-PB** 225 941 |
| 660/2-73-007 | 1BA027 | **Evaluation of Flame Emission Determination of Phosphorus in Water** BY W. R. Seitz, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2-73-007 $0.50 **NTIS-PB** 225 142/9AS |
| 660/2-73-008 | 1BA027 | **Mercury in the Environment** BY D. H. Klein, Hope College Holland, MI **ORDER FROM: GPO-**EP1.23/2:660/2-73-008 $0.65 **NTIS-PB** 231 256/AS |
| 660/2-73-009 | 1BA027 | **Evaluation of a Microwave-Induced Plasma Spectrometer for Trace Analysis** BY W. R. Seitz, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2-73-009 $0.65 **NTIS-PB** 231 390 |
| 660/2-73-010 | 1BB036 | **Treatment of Domestic Wastewater and NSSC Pulp and Paper Mill Wastes** BY P. J. Farrell, L. R. Heble, and A. G. Stenhser, Harriman Utility Board Harriman, TN **ORDER FROM: GPO-**EP1.23/2:660/2-73-010 $1.40 **NTIS-PB** 231 267/AS |
| 660/2-73-011 | 1BB392 | **Explicit Calibration of the Pills II System** BY F. M. Shofner, Environmental Systems Corporation Knoxville, TN **ORDER FROM: GPO-**EP1.23/2:660/2-73-011 $0.65 **NTIS-PB** 228 094 |
| 660/2-73-012 | 1BA032 | **Negatively Buoyant Jets in a Cross Flow** BY J. L. Anderson, F. L. Parker, and B. A. Benedict, Vanderbilt University Nashville, TN **ORDER FROM: GPO-**EP1.23/2:660/2-73-012 $2.50 **NTIS-PB** 234 177 |
| 660/2-73-013 | 1BA027 | **Environmental Applications of Advanced Instrumental Analysis: Assistance Projects, FY 72** BY A. L. Alford, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2-73-013 $0.85 **NTIS-PB** 228 147/AS |
| 660/2-73-014 | 1BA024 | **Subsurface Biological Activity in Relation to Ground Water Pollution** BY W. J. Dunlap, and J. F. McNabb, Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-73-014 $0.90 **NTIS-PB** 227 990 |
| 660/2-73-015 | 1BB037 | **Recovery of Fatty Materials From Edible Oil Refinery Effluents** BY W. C Seng, Swift and Company Oakbrook, IL **ORDER FROM: GPO-**EP1.23/2:660/2-73-015 $1.60 **NTIS-PB** 231 268/AS |
| 660/2-73-016 | 1BA032 | **Reviewing Environmental Impact Statements – Power Plant Cooling Systems, Engineering Aspects** BY A. G. Christianson, F. H. Rainwater, M. A. Shirazi, and B. A. Tichenor, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23/2:660/2-73-016 $1.35 **NTIS-PB** 228 604/AS |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 660/2-73-017 | 1BB044 | **Lime Disinfection of Sewage Bacteria at Low Temperature** BY S. M. Morrison, K. L. Martin, and D. E. Humbel, Colorado State University Fort Collins, CO **ORDER FROM: GPO-**EP1.23/2:660/2-73-017 $1.35 **NTIS-PB** 228 565/AS |
| 660/2-73-018 | 1BB036 | **Air Flotation – Biological Oxidation of Synthetic Rubber and Latex Wastewater** BY A. H. King, J. Ogea, and J. W. Sutton, Firestone Synthetic Rubber and Latex Company Lake Charles, Louisiana **ORDER FROM: GPO-**EP1.23/2:660/2-73-018 $1.60 **NTIS-PB** 229 408 |
| 660/2-73-019 | 1BB037 | **Color Removal From Kraft Mill Effluents By Ultrafiltration** BY H. A. Fremount, D. C. Tate, and R. L. Goldsmith, U.S. Plywood-Champion Paper, Inc. Hamilton, OH **ORDER FROM: GPO-**EP1.23/2:660/2-73-019 $2.40 **NTIS-PB** 231 257/AS |
| 660/2-73-020 | 1BB037 | **Information Resource: Final Report Water Pollution Control in Water Utilities** BY H. A. Faber, A. D. Narbozgi, and M. J. Taras, American Water Works Association Research Foundation New York, NY **ORDER FROM: GPO-**EP1.23/2:660/2-73-020 $1.05 **NTIS-PB** 231 270 $4.25 |
| 660/2-73-021 | 1BB037 | **Waste Control and Abatement in the Processing of Sweet Potatoes** BY C. Smallwood, North Carolina State University Raleigh, NC **ORDER FROM: GPO-**EP1.23/2:660/2-73-021 $1.15 **NTIS-PB** 238 469 |
| 660/2-73-022 | 1BB045 | **Tertiary Treatment With a Controlled Ecological System** BY A. L. Grom, Gram/Phillips Associates, Inc. Water District Calabasas, CA **ORDER FROM: GPO-**EP1.23/2:660/2-73-022 $0.90 **NTIS-PB** 231 261/AS |
| 660/2-73-023 | 1BB036 | **Regeneration of Chromated Aluminum Deoxidizers** BY H. C. Hicks, and R. A. Jarmuth, Boeing Commercial Airplane Company Seattle, WA **ORDER FROM: GPO-**EP1.23/2:660/2-73-023 $1.95 **NTIS-PB** 231 835/AS $6.25 |
| 660/2-73-024 | 1BB036 | **Treatment and Recovery of Fluoride Industrial Waste** BY C. J. Staebler Jr., Grumman Aerospace Corporation Bethpage, NY **ORDER FROM: GPO-**EP1.23/2:660/2-73-024 $1.40 **NTIS-PB** 234 447 |
| 660/2-73-025a | 1BB045 | **Hypolimnion Aeration With Commercial Oxygen – Volume I – Dynamics of Bubble Plume** BY R. E. Speece, and Fawzi Rayyan, Texas, University of Austin, TX **ORDER FROM: GPO-**EP1.23/2:660/2-73-025a $2.00 **NTIS-PB** 231 265/AS |
| 660/2-73-025b | 1BB045 | **Hypolimnion Aeration With Commercial Oxygen – Volume II – Bubble Plume Gas Transfer** BY R. E. Speece, and G. Murfee, Texas, University of Austin, TX **ORDER FROM: GPO-**EP1.23/2:660/2-73-025b $1.80 **NTIS-PB** 231 266/AS |
| 660/2-73-026 | 1BB392 | **Technical and Economic Evaluation of Cooling Systems Blowdown Control Techniques** BY D. B. Bories, J. E. Levia, and B. Baratz, WAPORA, Inc. Washington, DC **ORDER FROM: GPO-**EP1.23/2:660/2-73-026 $1.20 **NTIS-PB** 231 258/AS |
| 660/2-73-027 | 1BA027 | **Tissue Enzyme Assay for Chlorinated Hydrocarbon Insecticides** BY L. K. Cutkomp, Minnesota, University of St. Paul, MN **ORDER FROM: GPO-**EP1.23/2:660/2-73-027 $0.85 **NTIS-PB** 234 404 |
| 660/2-73-028 | 1BB037 | **Coliform Bacteria Growth and Control in Aerated Stabilization Basins** BY S. W. Watkins, Crown Zellerbach Corporation Camas, WA **ORDER FROM: GPO-**EP1.23/2:660/2-73-028 $2.75 **NTIS-PB** 231 259/AS |
| 660/2-73-029 | 1BA025 | **Mathematical Model for Barged Ocean Disposal of Wastes** BY R. C.Y. Kah, and Y. C. Chagy, Tetra Technology, Inc. Pasadena, CA **ORDER FROM: GPO-**EP1.23/2:660/2-73-029 $4.85 **NTIS-PB** 232 018 |
| 660/2-73-030 | 1BB037 | **Treatment of Sulfite Evaporator Condensates for Recovery of Volatile Components** BY K. W. Baierl, N. L. Chang, B. F. Lueck, A. J. Wiley, and R. A. Holm, Institute of Paper Chemistry Appleton, WI **ORDER FROM: GPO-**EP1.23/2:660/2-73-030 $2.10 **NTIS-PB** 233 139 |
| 660/2-73-031 | 1BB037 | **Proceedings Fourth National Symposium on Food Processing Wastes** Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23/2:660/2-73-031 $4.50 **NTIS-PB** 234 606 |
| 660/2-73-032 | 1BB036 | **Sulfuric Acid and Ferrous Sulfate Recovery From Waste Pickle Liquor** BY J. K. Seyler, W. E. Thornton, and M. K. Householder, Fitzsimmons Steel Company Youngstown, OH **ORDER FROM: GPO-**EP1.23/2:660/2-73-032 $1.20 **NTIS-PB** 233 112 |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 660/2-73-033 | 1BB036 | **New Membranes for Reverse Osmosis Treatment of Metal Finishing Effluents** BY L. T. Rozielle, C. V. Kopp Jr., and K. E. Cobian, North Star Research Corporation Minneapolis, MN **ORDER FROM: GPO-**EP1.23/2:660/2-73-033 $1.40 **NTIS-PB** 240 722/AS $4.75 |
| 660/2-73-034 | 1BA027 | **Infrared Fourier Transform Spectrometry of Gas Chromatography Effluents** BY L. V. Azarraga, and A. C. McCall, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2-73-034 $1.10 **NTIS-PB** 241 304/AS $4.25 |
| 660/2-73-035 | 1BB042 | **Joint Construction Sediment Control Project** BY B. C. Becker, D. B. Emerson, and M. A. Nawrocki, Hittman Associates, Inc. Columbia, MD Maryland, State of, Water Resources Administration Annaplois, MD **ORDER FROM: GPO-**EP1.23/2:660/2-73-035 $2.00 **NTIS-PB** 235 634/AS |
| 660/2-73-036 | 1BB036 | **Chemical/Physical and Biological Treatment of Wool Processing Wastes** BY L. T. Hatch, R. E. Sharpin, and W. T. Wirtanen, Metcalf and Eddy, Inc. Boston, MA **ORDER FROM: GPO-**EP1.23/2:660/2-73-036 $1.05 **NTIS-PB** 233 137 |
| 660/2-73-037 | 1BB037 | **Modular Wastewater Treatment System Demonstration For the Textile Maintenance Industry** BY G. Douglas, Envirex, Inc. Milwaukee, WI **ORDER FROM: GPO-**EP1.23/2:660/2-73-037 $3.45 **NTIS-PB** 231 837 |
| 660/2-73-038 | 1BB036 | **Final Report Deep Water Pilot Plant Treatability Study** Delaware River Basin Commission Trenton, NJ **ORDER FROM: GPO-**EP1.23/2:660/2-73-038 $4.10 **NTIS-PB** 234 441 |
| 660/2-73-039 | 1BB392 | **Measurement of Residual Chlorine Levels in Cooling Water — Amperometric Method** BY R. Manabe, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23/2:660/2-73-039 $1.10 **NTIS-PB** 238 780/AS |
| 660/2-74-001 | 1BA027 | **Multielement Analyses of Environmental Samples by Spark Source Mass Spectrometry** BY C. E. Taylor, and W. J. Taylor, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2-74-001 $0.65 **NTIS-PB** 234 456 |
| 660/2-74-002 | 1BA027 | **Evaluation of a Computer Program for GC-MS Specific Ion Monitoring** BY A. L. Alford, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2-74-002 $0.75 **NTIS-PB** 240 124/AS $3.75 |
| 660/2-74-003 | 1BB045 | **Conference on Recycling Treated Municipal Wastewater Through Forest and Cropland** BY W. E. Sopper, and L. T. Kardos, Pennsylvania State University University Park, PA **ORDER FROM: GPO-**EP1.23/2:660/2-74-003 $1.20 **NTIS-PB** 236 313/AS |
| 660/2-74-004 | 1BA027 | **Specific Ion Mass Spectrometric Detection for Gas Chromatographic Pesticide Analysis** BY M. B. Newher, and J. R. Hoyland, Battelle Memorial Institute Columbus, OH **ORDER FROM: GPO-**EP1.23/2:660/2-74-004 $1.55 **NTIS-PB** 233 136 |
| 660/2-74-005 | 1BB039 | **Quantification of Pollution in Agricultural Runoff** BY J. N. Dornbush, J. R. Andersen, and L. L. Harms, South Dakota State University Brookings,, SD **ORDER FROM: GPO-**EP1.23/2:660/2-74-005 $1.90 **NTIS-PB** 233 134 |
| 660/2-74-006 | 1BB037 | **Wastewater Abatement in Canning Vegetables by IQB Blanching** BY D. B. Lund, Wisconsin, University of Madison, WI **ORDER FROM: GPO-**EP1.23/2:660/2-74-006 $1.25 **NTIS-PB** 234 495 |
| 660/2-74-007 | 1BB037 | **Industrial Water Softener Waste Brine Reclamation** BY J. Burton, and E. Kreusch, Culligan International Company Northbrook, IL **ORDER FROM: GPO-**EP1.23/2:660/2-74-007 $1.95 **NTIS-PB** 233 132 |
| 660/2-74-008 | 1BB037 | **Color Removal and Sludge Disposal Process for Kraft Mill Effluents** BY E. L. Spruill, Continental Can Company Hodge, LA **ORDER FROM: GPO-**EP1.23/2:660/2-74-008 $1.65 **NTIS-PB** 235 573/AS |
| 660/2-74-009 | 1BB039 | **Demonstration of Three Recirculating Swine Waste Management Systems** BY J. R. Miner, T. E. Hazen, R. J. Smith, and G. B. Parker, Iowa State University Ames, IA **ORDER FROM: GPO-**EP1.23/2:660/2-74-009 $1.90 **NTIS-PB** 234 179 |
| 660/2-74-010 | 1BA024 | **Saline Groundwater Produced with Oil and Gas** BY A. G. Collins, U.S. Bureau of Mines Bartlesville, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-010 $1.15 **NTIS-PB** 234 385 |

# BIBLIOGRAPHIC SECTION

**REPORT NO.**

660/2-74-011 1BB392 **Demonstration of Thermal Water Utilization in Agriculture** BY J. W. Berry, and H. H. Miller Jr., Eugene Water and Electric Board Eugene, OR **ORDER FROM: GPO-**EP1.23/2:660/2-74-011 $2.80 **NTIS-PB** 234 178

660/2-74-012 1BB037 **Treatment of Cheese Processing Wastewaters in Aerated Lagoons** BY F. R. Daul, Kent Cheese Company Melrose Park, IL **ORDER FROM: GPO-**EP1.23/2:660/2-74-012 $1.50 **NTIS-PB** 237 334/AS

660/2-74-013 1BB039 **Pesticide, Transport and Runoff Model for Agricultural Land** BY N. H. Crawford, and A. S. Donigian, Hydrocomp, Inc. Palo Alto, CA **ORDER FROM: GPO-**EP1.23/2:660/2-74-013 $2.40 **NTIS-PB** 235 723/AS $4.90

660/2-74-014 1BB037 **Activated Sludge – Bio-Disc Treatment of Distillery Wastewater** BY J. L. Thomas, and L. G. Koehrsen, Stanley Consultants, Inc. Muscatine, IA American Distilling Company Pekin, IL **ORDER FROM: GPO-**EP1.23/2:660/2-74-014 $1.40 **NTIS-PB** 234 383

660/2-74-015 **(No. Cancelled) ORDER FROM:** (No. Cancelled)

660/2-74-016 1BB045 **Renovation of Secondary Effluent for Re-use as a Water Resource** BY L. T. Kardos, W. E. Sopper, E. Myers, and J. Nesbitt, Pennsylvania State University University Park, PA **ORDER FROM: GPO-**EP1.23/2:660/2-74-016 $4.80 **NTIS-PB** 234 176

660/2-74-017 1BB039 **Herbicide Runoff from Four Coastal Plain Soil Types** BY G. W. Bailey, W. R. Payne, and C. N. Smith, Southeast Environmental Research Laboratory, EPA Athens, GA BY A. P. Barnett, Southern Piedmont Conservation Research Center Watkinsville, GA **ORDER FROM: GPO-**EP1.23/2:660/2-74-017 $1.45 **NTIS-PB** 235 571/AS

660/2-74-018 1BB040 **Storage and Disposal of Iron Ore Processing Wastewater** BY C. R. Baillod, and G. R. Alger, Michigan Technological University Houghton, MI **ORDER FROM: GPO-**EP1.23/2:660/2-74-018 $1.80 **NTIS-PB** 234 180

660/2-74-019 1BB040 **North Fork Alluvial Decontamination Project, Hubbard Creek Reservoir Watershed** BY B. L. Jacob, Texas Municipal Water District, West Central Abilene, TX **ORDER FROM: GPO-**EP1.23/2:660/2-74-019 $0.95 **NTIS-PB** 236 798/AS

660/2-74-020 1BB037 **Evaluation of Polymeric Clarification of Meat-Packing and Domestic Wastewaters** Metropolitan Sewer Board St. Paul, MN **ORDER FROM: GPO-**EP1.23/2:660/2-74-020 $2.30 **NTIS-PB** 235 900/AS

660/2-74-021 1BA027 **Analysis of Coprostanol, An Indicator of Fecal Contamination** BY J. E. Singley, C. J. Kirchmer, and R. Miura, Florida, University of Gainesville, FL **ORDER FROM: GPO-**EP1.23/2:660/2-74-021 $1.60 **NTIS-PB** 235 491/AS

660/2-74-022 **(No. Cancelled) ORDER FROM:** (No. Cancelled)

660/2-74-023 1BB039 **Odors from Confined Livestock Production – A State of the Art** BY J. R. Miner, Ohio State University Columbus, OH **ORDER FROM: GPO-**EP1.23/2:660/2-74-023 $1.70 **NTIS-PB** 234 182

660/2-74-024 1BB039 **Livestock and the Environment – A Bibliography with Abstracts** BY R. J. Ramsey, East Central State College Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-024 $3.50

660/2-74-025 1BB037 **Protein Production from Acid Whey VIA Fermentation** BY S. Bernstein, and T. C. Everson, Milbrew, Inc. Juneau, WI **ORDER FROM: GPO-**EP1.23/2:660/2-74-025 $1.25 **NTIS-PB** 235 504/AS

660/2-74-026 **(No. Cancelled) ORDER FROM:** (No. Cancelled)

660/2-74-027 1BB037 **Treatment of Packing House Waste by Anaerobic Lagoons in Plastic-Media Filters** BY D. A. Baker, A. H. Wymore, and J. E. White, Family and Foods, Inc. Denison, IA **ORDER FROM: GPO-**EP1.23/2:660/2-74-027 $1.20 **NTIS-PB** 235 566/AS

660/2-74-028 1BB037 **Biological Treatment of Concentrated Sugar Beet Wastes** BY J. H. Fisher, Beet Sugar Development Foundation Fort Collins, CO **ORDER FROM: GPO-**EP1.23/2:660/2-74-028 $1.75 **NTIS-PB** 240 123/AS $4.75

660/2-74-029 1BB037 **Color Characterization Before and After Lime Treatment** BY H. S. Dugal, R. M. Leekley, and J. W. Swanson, Institute of Paper Chemistry Appleton, WI **ORDER FROM: GPO-**EP1.23/2:660/2-74-029 $2.15 **NTIS-PB** 235 493/AS

# BIBLIOGRAPHIC SECTION

| REPORT NO. | |
|---|---|
| 660/2-74-030 | 1BB039 **Anaerobic-Aerobic Lagoon Treatment of Dairy Manure Wastes** BY D. E. Proctor, Washington State University Pullman, WA **ORDER FROM: NTIS-PB** 235 574 $6.00 |
| 660/2-74-031 | 1BB037 **Water and Waste Management in Poultry Processing** BY R. E. Carawan, J. Macon, and W. M. Crosswhite, North Carolina State University Raleigh, NC BY B. K. Hawkins, Gold Kist, Inc. Durham, NC **ORDER FROM: GPO-**EP1.23/2:660/2-74-031 $2.50 **NTIS-PB** 235 559/AS $7.50 |
| 660/2-74-032 | 1BB039 **Pesticide Movement from Crop Lands into Lake Erie** BY A. C. Waldron, Ohio State University, Department of Entomology Columbus, OH **ORDER FROM: GPO-**EP1.23/2:660/2-74-032 $1.40 **NTIS-PB** 235 650/AS |
| 660/2-74-033 | 1BB039 **Nitrogen and Phosphorus Losses from Agronomy Plots in North Alabama** BY R. R. Bradford, Alabama A&M College Normal, AL **ORDER FROM: GPO-**EP1.23/2:660/2-74-033 $0.90 **NTIS-PB** 235 931/AS |
| 660/2-74-034 | 1BB039 **Liquid Aerobic Composting of Cattle Wastes and Evaluation of Byproducts** BY F. Grant, and F. Brommenschenkel Jr., Chino Basin Municipal Water District Cucamonga, CA **ORDER FROM: GPO-**EP1.23/2:660/2-74-034 $0.95 **NTIS-PB** 235 914/AS |
| 660/2-74-035 | 1BB037 **Improvement of Treatment of Food Industry Waste** BY S. B. Tuwiner, RAI Research Corporation Haupage, Long Island, NY **ORDER FROM: GPO-**EP1.23/2:660/2-74-035 $1.25 **NTIS-PB** 234 444 |
| 660/2-74-036 | 1BB039 **Development of Field Applied DDT** BY K. H. Sweeny, J. R. Fischer, A. F. Gray, H. J. Marcus, and D. H. W. Liu, Envirogenics Company, Division of Aerojet-General Corporation El Monte, CA **ORDER FROM: GPO-**EP1.23/2:660/2-74-036 $1.45 **NTIS-PB** 235 943/AS |
| 660/2-74-037 | 1BB040 **Brine Disposal Treatment Practices Relating to the Oil Production Industry** BY G. W. Reid, L. E. Streebin, L. Canter, and J. Smith, Oklahoma, University of Norman, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-037 $2.90 **NTIS-PB** 235 886/AS |
| 660/2-74-038 | 1BB040 **State-of-the-Art: Uranium Mining, Milling, and Refining Industry** BY D. A. Clark, Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-038 $1.55 **NTIS-PB** 235 557/AS $5.25 |
| 660/2-74-039 | 1BB036 **Catalyzed Bio-Oxidation and Tertiary Treatment of Integrated Textile Wastewaters** BY A. J. Snyder, Fram Corporation Pawtucket, RI BY T. A. Alspaugh, Cone Mills Corporation Greensboro, NC **ORDER FROM: GPO-**EP1.23/2:660/2-74-039 $1.55 **NTIS-PB** 238 292/AS |
| 660/2-74-040 | 1BB037 **Granite Industry Wastewater Treatment** BY W. B. Farnham, Vermont, State of, Department of Water Resources Montpelier, VT **ORDER FROM: GPO-**EP1.23/2:660/2-74-040 $1.45 **NTIS-PB** 235 505 |
| 660/2-74-041 | 1BB045 **Wastewater Use in the Production of Food and Fiber—Proceedings of Conference held at Oklahoma City, OK March 5-7, 1974** Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-041 $5.35 |
| 660/2-74-042 | 1BB045 **Land Application of Sludge Effluent and Sludges: Selected Abstracts** Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-042 $2.80 **NTIS-PB** 235 386 $8.50 |
| 660/2-74-043 | 1BB042 **Prediction of Sub-soil Erodibility Using Chemical, Mineralogical and Physical Parameters** BY C. Roth, D. Nelson, and M. J. M. Romkens, Purdue University Lafayette, IN **ORDER FROM: GPO-**EP1.23/2:660/2-74-043 $1.90 **NTIS-PB** 239 442/AS $3.90 |
| 660/2-74-044 | 1BB037 **Test Method for Volatile Component Stripping of Wastewater** BY L. J. Thibodeaux, Arkansas, University of, College of Engineering Fayetteville, AR **ORDER FROM: GPO-**EP1.23/2:660/2-74-044 $1.70 **NTIS-PB** 235 567/AS |
| 660/2-74-045 | 1BA027 **Comparison of Germanium Detectors for Neutron Activation Analysis for Mercury** BY R. V. Moore, and O. W. Propheter, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2-74-045 $0.65 **NTIS-PB** 235 944/AS |
| 660/2-74-046 | 1BB037 **Paunch Manure as a Feed Supplement in Channel Catfish Farming** BY R. C. Summerfelt, Oklahoma State University Stillwater, OK BY S. C. Yin, Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-046 $1.60 **NTIS-PB** 235 575/AS |

## BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 660/2–74–047 | 1BB039 | **Waste Treatment System for Confined Hog Raising Operations** BY W. R. Park, Midwest Research Institute Kansas City, MO **ORDER FROM: GPO-**EP1.23/2:660/2–74–047 **$1.20 NTIS-PB** 235 558/AS **$4.75** |
| 660/2–74–048 | 1BA027 | **Implementation of a Computer Based Information System for Mass Spectral Identification** BY J. R. Hoyland, and M. B. Neher, Battelle Memorial Institute Columbus, OH **ORDER FROM: GPO-**EP1.23/2:660/2–74–048 **$1.10 NTIS-PB** 239 933 **$3.75** |
| 660/2–74–049 | 1BB039 | **Selected Irrigation Return Flow Quality Abstracts: 1972–1973** BY G. V. Skogerboe, W. R. Walker, R. S. Bennett, and B. J. Zakely, Colorado State University Fort Collins, CO **ORDER FROM: GPO-**EP1.23/2:660/2–74–049 **$3.85 NTIS-PB** 235 385 **$10.50** |
| 660/2–74–050 | 1BB036 | **Research Study of Coal Preparation Plant and By-Product Coke Plant Effluents** BY E. F. Pearson, C. F. and T. Steel Corporation Pueblo, CO **ORDER FROM:** Pending |
| 660/2–74–051 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 660/2–74–052 | 1BB039 | **Evaluation of Irrigation Scheduling for Salinity Control in Grand Valley** BY G. V. Skogerboe, W. R. Walker, J. H. Taylor, and R. S. Bennett, Colorado State University Fort Collins, CO **ORDER FROM: GPO-**EP1.23/2:660/2–74–052 **$1.30 NTIS-PB** 235 633/AS |
| 660/2–74–053 | 1BB045 | **Hypolimnetic Flow Regimes in Lakes and Impoundments** BY J. Edinger, N. Yanagida, and I. M. Cohen, Pennsylvania, University of Philadelphia, PA **ORDER FROM: GPO-**EP1.23/2:660/2–74–053 **$2.10 NTIS-PB** 235 391 **$7.00** |
| 660/2–74–054 | 1BB039 | **Volatization of Losses of Pesticides from Soil** BY J. Lenny, and W. J. Farmer, California, University of Riverside, CA **ORDER FROM: GPO-**EP1.23/2:660/2–74–054 **$1.45 NTIS-PB** 239 325/AS |
| 660/2–74–055 | 1BB036 | **Physical-Chemical Treatment of Municipal Wastes by Recycled Magnesium Carbonate** BY A. P. Black, A. T. DeBose, and R. P. Vogh, Gainesville, City of Gainesville, FL **ORDER FROM: GPO-**EP1.23/2:660/2–74–055 **$1.90 NTIS-PB** 239 326/AS |
| 660/2–74–056 | 1BA024 | **Ground Water Contamination in the Northeast States** BY D. W. Miller, F. A. DeLuca, and T. L. Tessier, Geraghty and Miller, Inc. Port Washington, NY **ORDER FROM: GPO-**EP1.23/2:660/2–74–056 **$3.30 NTIS-PB** 235 702/AS **$5.80** |
| 660/2–74–057 | 1BB039 | **Soil Modification for Denitrification and Phosphate Reduction of Feed Lot Wastes** BY A. E. Erickson, W. J. Ellis, J. D. Pievge, A. R. Walcott, C. M. Hansen, F. P. Peabody, E. C. Miller, and J. W. Thomas, Michigan State University East Lansing, MI **ORDER FROM: GPO-**EP1.23/2:660/2–74–057 **$1.60 NTIS-PB** 235 909/AS |
| 660/2–74–058 | 1BB037 | **Proceedings: Fifth National Symposium on Food Processing Wastes** BY K. A. Dostal, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23/2:660/2–74–058 **$3.80 NTIS-PB** 237 520/AS **$6.30** |
| 660/2–74–059 | 1BB037 | **Submerged Combustion Evaporator for Concentration of Brewery Spent Grain Liquor** BY J. L. Stein, Anheuser Busch St. Louis, MO **ORDER FROM: GPO-**EP1.23/2:660/2–74–059 **$1.85 NTIS-PB** 238 475/AS |
| 660/2–74–060 | 1BB037 | **Poultry Processing Wastewater Treatment and Reuses** BY J. D. Cliese, Maryland, State of, Department of Health and Mental Hygiene Baltimore, MD **ORDER FROM: GPO-**EP1.232/:660/2–74–060 **$1.15 NTIS-PB** 237 185/AS |
| 660/2–74–061 | 1BB037 | **Shrimp Canning Waste Treatment Study** BY A. F. Maudlin, and A. J. Szabo, Dominque, Szabo and Associates, Inc. Lafayette, LA **ORDER FROM: GPO-**EP1.23/2:660/2–74–061 **$2.05 NTIS-PB** 239 050/AS |
| 660/2–74–062 | 1BB045 | **Feasibility of Overflow Overland Flow Treatment of Feedlot Runoff** BY R. E. Thomas, Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2–74–062 **$0.85 NTIS-PB** 238 481/AS |
| 660/2–74–063 | 1BB039 | **Design Parameters for Animal Waste Treatment Systems** BY T. B. S. Parkasam, P. Y. Loehu, P. Y. Yang, T. W. Scott, and T. W. Bateman, Cornell University Ithaca, NY **ORDER FROM: GPO-**EP1.23/2:660/2–74–063 **$3.00** |
| 660/2–74–064 | 1BB039 | **Pollution Aspects of Catfish Production—Review and Projections** BY J. C. Barker, J. L. Chesness, and R. E. Smith, Georgia, University of Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2–74–064 **$1.65** |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 660/2-74-065 | 1BB040 | **Evaluation of Tailings Ponds Sealants** BY D. A. Clark, and J. E. Moyer, Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-065 $0.70 **NTIS-PB** 235 929/AS |
| 660/2-74-066 | 1BB040 | **State-of-the-Art: Sand and Gravel Industry** BY B. D. Newport, and J. E. Moyer, Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-066 $0.85 **NTIS-PB** 236 147/AS $2.85 |
| 660/2-74-067 | 1BB040 | **Pollution Problems and Research Needs for an Oil Shale Industry** BY F. M. Pfeffer, Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-067 $0.85 **NTIS-PB** 236 608/AS |
| 660/2-74-068 | 1BB039 | **Losses of Fertilizers and Pesticides from Claypan Soils** BY G. E. Smith, Missouri, University of Columbia, MO **ORDER FROM: GPO-**EP1.23/2:660/2-74-068 $1.45 **NTIS-PB** 239 931 $4.75 |
| 660/2-74-069 | 1BB037 | **Studies of Low Molecular Weight Lignin Sulfonates** BY W. G. Glasser, J. S. Gratzl, K. Forso, B. F. Hrutfiord, L. N. Johanson, J. L. McCarthy, and J. Collins, Washington, University of Seattle, WA **ORDER FROM: GPO-**EP1.23/2:660/2-74-069 $1.55 **NTIS-PB** 239 368/AS |
| 660/2-74-070 | 1BB044 | **Extended Aeration Sewage Treatment in Cold Climate — Abstracted 600/9-75-001a** —BY H. J. Coutts, and C. B. Christianson, Arctic Environmental Research Laboratory, EPA College, AK **ORDER FROM: NTIS-PB** 240 350/AS $4.75 |
| 660/2-74-071 | 1BB042 | **Programmed Demonstration for Erosion and Sediment Control Specialist** BY T. R. Mills, M. A. Nawrocki, G. R. Squire, H. T. Hopkins, and M. L. Clar, Maryland, State of, Water Resources Administration Annapolis, MD **ORDER FROM: GPO-**EP1.23/2:660/2-74-071 $2.15 **NTIS-PB** 239 425/AS $4.65 |
| 660/2-74-072 | 1BB042 | **Demonstration of the Separation and Disposal of Concentrated Sediments** BY M. A. Nawrocki, Hittman Associates, Inc. Columbia, MD **ORDER FROM: GPO-**EP1.23/2:660/2-74-072 $1.45 **NTIS-PB** 239 322/AS |
| 660/2-74-073 | 1BB042 | **Executive Summary of Three EPA Demonstration Programs in Erosion and Sediment Control** BY G. Sitek, B. C. Becker, and M. A. Nawrocki, Hittman Associates, Inc. Columbia, MD **ORDER FROM: GPO-**EP1.23/2:660/2-74-073 $1.20 **NTIS-PB** 239 333/AS |
| 660/2-74-074 | 1BB037 | **Rum Distillery Slops Treatment by Anaerobic Contact Process** BY T. Shea, E. Ramos, J. Rodriguez, and G. Dorion, Bacardi Company San Juan, PR **ORDER FROM: GPO-**EP1.23/2:660/2-74-074 $1.55 **NTIS-PB** 238 291/AS |
| 660/2-74-075 | 1BB037 | **Wastewater Characterization for the Specialty Food Industry** BY C. J. Schmidt, J. Farquhar, and E. V. Clements, SCS Engineers Long Beach, CA **ORDER FROM:** Pending |
| 660/2-74-076 | 1BA027 | **Automated Analysis of Individual Refractory Organics in Polluted Water** BY W. Pitt, R. Jolley, and S. Katz, Oak Ridge National Laboratory Oak Ridge, TN **ORDER FROM: GPO-**EP1.23/2:660/2-74-076 $1.75 **NTIS-PB** 239 774/AS $5.25 |
| 660/2-74-077 | 1BA024 | **Organic Compounds Entering Groundwater from a Landfill** BY J. Robertson, G. R. Toussaint, and M. A. Jorque, Oklahoma, University of Norman, OK **ORDER FROM: GPO-**EP1.23/2:660/2-74-077 $1.15 **NTIS-PB** 237 969/AS |
| 660/2-74-078 | 1BA027 | **Environmental Applications of Advanced Instrumental Analyses: Assistance Projects, FY '73** BY A. L. Alford, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23/2:660/2-74-078 $1.00 **NTIS-PB** 238 472/AS |
| 660/2-74-079 | 1BA027 | **Ion-Selective Membranes Electrodes for Water Pollution Water Monitoring** BY G. A. Rechnitz, New York, State University of Buffalo, NY **ORDER FROM: GPO-**EP1.23/2:660/2-74-079 $0.80 **NTIS-PB** 238 490/AS $2.80 |
| 660/2-74-080 | | **(Unassigned) ORDER FROM:** (Unassigned) |
| 660/2-74-081 | 1BA029 | **Summary Report, Trail-Marking and Alarm Pheromones of Some Ants of the Genus Atta** BY R. G. Riley, and R. M. Silverstein, New York, State University of Syracuse, NY **ORDER FROM: NTIS-PB** 235 562/AS $4.75 |
| 660/2-74-082 | 1BA023 | **Dispersal Processes in Lake Huron** BY G. T. Csanady, I. S. F. Jones, and B. C. Kenney, Waterloo, University of Ontario, Canada **ORDER FROM:** Pending |

## BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 660/2–74–083 | 1BA023 | **Dynamics and Diffusion in the Great Lakes** BY G. T. Csanady, B. Pade, G. M. Bragg, M. Mekinda, and A. M. Hale, Waterloo, University of Ontario, Canada **ORDER FROM:** Pending |
| 660/2–74–084 | 1BB039 | **Evaluation of Drainage for Salinity Control in Grand Valley** BY G. Skogerboe, W. R. Walker, R. S. Bennett, J. Ayars, and J. Taylor, Colorado State University Fort Collins, CO **ORDER FROM: GPO-**EP1.23/2:660/2–74–084 $1.75 |
| 660/2–74–085 | 1BA032 | **Effect of Geographical Variation on Performance of Recirculating Cooling Ponds** BY E. L. Thaxton, Vanderbilt University Nashville, TN **ORDER FROM: GPO-**EP1.23/2:660/2–74–085 Price Pending **NTIS-PB** 238 903/AS |
| 660/2–74–086 | 1BB037 | **Mercury Recovery from Contaminated Waste Waters and Sludges** Georgia Pacific Corporation Bellingham, WA **ORDER FROM: GPO-**EP1.23/2:660/2–74–086 $1.95 **NTIS-PB** 238 600/AS |
| 660/2–74–087 | 1BB045 | **Feasibility of Overland Flow for Treatment of Raw Domestic Wastewater** BY R. E. Thomas, K. Jackson, and L. Penrod, Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK **ORDER FROM: GPO-**EP1.23/2:660/2–74–087 $0.85 **NTIS-PB** 238 926/AS |
| 660/2–74–088 | 1BB037 | **Infrared Dry Caustic vs. Wet Caustic Peeling of White Potatoes** BY O. Sproul, J. Vennes, W. Knudson, and J. W. Cyr, Western Potato Service, Inc. Grand Forks, ND Potato Service, Inc. Presque Isle, ME **ORDER FROM:** Pending |
| 660/2–74–089 | 1BB392 | **Water Recycle/Reuse Possibilities: Power Plant Boiler and Cooling System** BY G. R. Nelson, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23/2:660/2–74–089 $1.15 **NTIS-PB** 238 794/AS $3.15 |
| 660/2–74–090 | 1BB039 | **Conversion of Cattle Feedlot Wastes to Ammonia Synthesis Gas** BY J. E. Halligan, H. W. Parker, R. M. Swaezy, and K. L. Herzog, Texas Technical University Lubbock, TX **ORDER FROM:** Pending |
| 660/2–74–091 | 1BB037 | **Continuous Inplant Hot Gas Blanching of Vegetables** BY J. W. Ralls, and W. A. Mercer, National Canners Association Berkeley, CA **ORDER FROM: GPO-**EP1.23/2:660/2–74–091 Price Pending **NTIS-PB** 238 601/AS |
| 660/2–74–092 | 1BB037 | **Dry Caustic Heating of Clingstone Peaches on a Commercial Scale** BY H. E. Stone, DelMonte Corporation San Francisco, CA **ORDER FROM: NTIS-PB** 239 751/AS $4.25 |
| 660/2–74–093 | 1BB037 | **Separation, Dewatering, and Disposal of Sugar Beet Transport Water Solids Phase I** BY I. V. Fordyce, and A. M. Cooley, American Crystal Sugar Company Denver, CO **ORDER FROM:** Pending |
| 660/2–74–094 | 1BB036 | **Pollution Control Technology for Pesticide Formulators and Packagers — Abstracted 600/9–75–001a** —BY T. L. Ferguson, Midwest Research Institute Kansas City, MO **ORDER FROM: NTIS-PB** 241 001/AS $6.25 |
| 660/2–75–001 | 1BB037 | **Waste Citrus Activated Sludge As a Poultry Feed Ingredient — Abstracted 600/9–75–001a** —BY R. H. Jones, J. T. White, and B. L. Damron, Winter Garden Citrus Products Cooperative Winter Garden, FL **ORDER FROM: NTIS-PB** 240 672/AS $4.25 |
| 660/2–75–002 | 1BB037 | **Pilot Scale Treatment of Wine Stillage — Abstracted 600/9–75–001a** —BY E. D. Schroeder, California, University of Davis, CA **ORDER FROM: NTIS-PB** 240 996/AS $5.75 |
| 660/2–75–003 | 1BB039 | **Livestock and the Environment—A Bibliography with Abstracts, Volume II — Abstracted 600/9–75–001a** —BY R. H. Ramsey, M. L. Rowe, and L. Merryman, East Central Oklahoma State University Ada, OK **ORDER FROM:** Pending |
| 660/2–75–004 | 1BB037 | **Activated Carbon Treatment of Unbleached Kraft Effluent for Reuse — Abstracted 600/9–75–001a** —BY E. W. Lang, W. G. Timpe, and R. L. Miller, St. Regis Paper Company Pensacola, FL **ORDER FROM:** Pending |
| 660/2–75–005 | 1BB039 | **Management Practices Affecting Quality and Quantity of Irrigation Return Flow — Abstracted 600/9–75–001a** —BY L. G. King, and R. J. Hanks, Utah State University Logan, UT **ORDER FROM:** Pending |
| 660/2–75–006 | 1BB036 | **Plant Scale Studies of the Magnesium Carbonate Water Treatment Process** BY A. P. Black, and C. G. Thompson, Black, Crow and Eidsness, Inc. Montgomery, AL **ORDER FROM: NTIS-PB** 242 253/AS $6.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 660/2-75-007 | 1BB045 | **Water Quality Effect of Diking a Shallow Arid-Region Lake — Abstracted 600/9-75-001a** —BY D. K. Fuhriman, L. B. Merritt, J. S. Bradshaw, and J. R. Barton, Brigham Young University Provo, UT **ORDER FROM:** Pending |
| 660/2-75-008 | 1BB045 | **Role of Trace Elements in Management of Nuisance Growths — Abstracted 600/9-75-001a** —BY T. Bott, R. Patrick, and R. Larson, Academy of Natural Sciences of Philadelphia Philadelphia, PA **ORDER FROM:** Pending |
| 660/2-75-009 | 1BB039 | **Use of Soil Parameters for Describing Pesticide Movement Through Soils** BY J. M. Davidson, G. H. Brusewitz, D. R. Baker, and A. L. Wood, Oklahoma State University Stillwater, OK **ORDER FROM:** Pending |
| 660/2-75-010 | 1BB039 | **Research Status of Effects of Land Application of Animal Wastes** BY W. L. Powers, G. W. Wallingford, and L. S. Murphy, Kansas State University Manhattan, KS **ORDER FROM:** Pending |
| 660/2-75-011 | 1BB036 | **Process and Environmental Technology for Producing SNG and Liquid Fuels** BY M. R. Beychok, Beychok, Milton R., Consulting Engineer Irvine, CA **ORDER FROM:** Pending |
| 660/2-75-012 | 1BB039 | **Survival of Pathogens in Animal Manure Disposal** BY S. L. Diesch, P. R. Goodrich, B. S. Pomeroy, and L. A. Will, Minnesota, University of St. Paul, MN **ORDER FROM:** Pending |
| 660/2-75-013 | 1BB039 | **Treatment and Ultimate Disposal of Cattle Feedlot Wastes** BY H. L. Manges, R. I. Lipper, L. S. Murphy, W. L. Powers, and L. A. Schmid, Kansas State University Manhattan, KS **ORDER FROM:** Pending |
| 660/3-73-001 | 1BA031 | **Weed Harvest and Lake Nutrient Dynamics** BY J. K. Neel, S. A. Peterson, and W. L. Smith, North Dakota, University of Grand Forks, ND **ORDER FROM: GPO-**EP1.23: 660/3-73-001 $2.35 **NTIS-PB** 224 492/AS |
| 660/3-73-002 | 1BA031 | **Nitrogen Sources and Cycling in Natural Waters** BY P. L. Brezonik, Florida, University of Gainesville, FL **ORDER FROM: GPO-**EP1.23: 660/3-73-002 $2.35 $4.25 **NTIS-PB** 224 491/AS |
| 660/3-73-003 | 1BA031 | **Organic Nutrient Factors Effecting Algal Growths** BY N. L. Clesceri, Rensselaer Polytechnic Institute Troy, NY **ORDER FROM: GPO-**EP1.23: 660/3-73-003 $2.80 **NTIS-PB** 226 874/AS |
| 660/3-73-004 | 1BA021 | **Water Quality Requirements of Aquatic Insects** BY A. R. Gaufin, Utah, University of Salt Lake City, UT **ORDER FROM: GPO-**EP1.23: 660/3-73-004 $1.20 **NTIS-PB** 228 582/AS |
| 660/3-73-005 | 1BA025 | **Oxidation of Organic Matter in Sediments** BY M. M. Pamatmat, Auburn University Auburn, AL BY R. S. Jones, H. Sanborn, and A. Bhagwat, Washington, University of Seattle, WA **ORDER FROM: GPO-**EP1.23: 660/3-73-005 $1.30 **NTIS-PB** 231 248/AS |
| 660/3-73-006 | 1BA031 | **Development of a Selective Algaecide to Control Nuisance Algal Growth** BY B. L. Pows, and W. F. McIlhenny, Dow Chemical Company Freeport, TX **ORDER FROM: GPO-**EP1.23: 660/3-73-006 $1.50 **NTIS-PB** 225 027/2AS |
| 660/3-73-007 | 1BA023 | **Effects of Protozoa on the Fate of Particulate Carbon** BY H. W. Holm, and F. A. Smith, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23: 660/3-73-007 $0.70 **NTIS-PB** 225 143/7AS |
| 660/3-73-008 | 1BA023 | **Biological Models of Freshwater Communities** BY F. B. Taub, Washington, University of Seattle, WA **ORDER FROM: GPO-**EP1.23: 660/3-73-008 $1.05 **NTIS-PB** 225 029/8AS |
| 660/3-73-009 | 1BA023 | **Dynamic Water Quality Forecasting and Management** BY D. J. O'Connor, R. V. Thomann, and D. M. Ditoro, Manhattan College Bronx, NY **ORDER FROM: GPO-**EP1.23: 660/3-73-009 $2.05 **NTIS-PB** 225 048/8AS |
| 660/3-73-010 | 1BA025 | **Dispersion in Hydrologic and Coastal Environments** BY N. G. Brooks, California Institute of Technology Pasadena, CA **ORDER FROM: GPO-**EP1.23: 660/3-73-010 $1.55 **NTIS-PB** 226 890 |
| 660/3-73-011 | 1BA023 | **Big Eddies and Mixing Processes in the Great Lakes** BY G. T. Csanady, Waterloo, University of Waterloo, Ontario, Canada **ORDER FROM: GPO-**EP1.23: 660/3-73-011 $0.50 **NTIS-PB** 237 720/AS |
| 660/3-73-012 | 1BA023 | **Chemistry of Organmercurials in Aquatic Systems** BY G. L. Baugham, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23: 660/3-73-012 $1.30 **NTIS-PB** 226 889/AS |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 660/3-73-013 | 1BA025 | **Petroleum Weathering: Some Pathways, Fate and Disposition on Marine Waters** BY M. H. Feldman, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM:** M. H. Feldman, 503-752-4211, X-370 |
| 660/3-73-014 | 1BA025 | **Puget Sound Oceanographic Field Studies Data Report, Everett, BELLINGHAM, Port Angeles, 1962-63** BY R. J. Callaway, J. Vlastelicia, and G. R. Ditsworth, Pacific Northwest Environmental Research Laboratory,EPA Corvallis, OR **ORDER FROM:** R. J. Callaway, 503 752-4211, X-369 |
| 660/3-73-015 | 1BA031 | **Effect of Phosphorus Removal Processes on Algal Growth** BY J. Scherifig, P. S. Dixon, R. Appleman, and C. A. Justice, California, University of Irvaine, CA **ORDER FROM: GPO-**EP1.23: 660/3-73-015 $1.20 **NTIS-PB** 228 585/AS |
| 660/3-73-016 | 1BA021 | **Studies on Southeastern Aquatic Insects** BY J. B. Wallace, Georgia, University of Athens, GA **ORDER FROM: NTIS-PB** 232 183/AS $5.75 |
| 660/3-73-017 | 1BA021 | **Pollution Effects on Adult Steelhead Migration in the Snake River** BY C. M. Falter, and R. R. Ringe, Idaho, University of Moscow, ID **ORDER FROM: GPO-**EP1.23: 660/3-73-017 $1.50 **NTIS-PB** 232 990 |
| 660/3-73-018 | 1BA022 | **Effects of Crude Oil and Some of Its Components on Young Coho and Sockeye Salmon** BY J. E. Morrow, Alaska, University of Fairbanks, AK **ORDER FROM: GPO-**EP1.23: 660/3-73-018 $0.85 **NTIS-PB** 232 094/AS |
| 660/3-73-019 | 1BA021 | **Early Life History and Feeding of Young Mountain Whitefish** BY C. B. Stalnaker, and R. E. Gresswell, Utah State University Logan, UT **ORDER FROM: GPO-**EP1.23: 660/3-73-019 $0.95 **NTIS-PB** 232 992 |
| 660/3-73-020 | 1BA021 | **Effects of Temperature on Diseases of Salmonid Fishes** BY J. L. Fryer, and K. S. Pilcher, Oregon State University Corvallis, OR **ORDER FROM: GPO-**EP1.23: 660/3-73-020 $1.55 **NTIS-PB** 232 988 |
| 660/3-73-021 | 1BA026 | **First Annual Reports of EPA Grants Funded for IFYGL** Grosse Ile Laboratory, EPA Grosse Ile, MI **ORDER FROM: NTIS-PB** 235 947/AS $20.75 |
| 660/3-73-022 | 1BA023 | **Review of the Physiological Impact of Mercurials** BY M. C. Ferens, Georgia, University of Athens, GA **ORDER FROM: GPO-**EP1.23: 660/3-73-022 $1.00 **NTIS-PB** 234 644 $4.25 |
| 660/3-73-023 | 1BA031 | **Applications of Growth and Sorption Algal Assays** BY G. P. Fitzgerald, and P. D. Uttormark, Wisconsin, University of Madison, WI **ORDER FROM: GPO-**EP1.23: 660/3-73-023 $2.10 **NTIS-PB** 232 446/AS |
| 660/3-73-024 | 1BA031 | **Protocol for Evaluating the Nitrogen Status of Lake Sediments** BY D. R. Keeney, Wisconsin, University of Madison, WI **ORDER FROM: GPO-**EP1.23: 660/3-73-024 $0.65 **NTIS-PB** 233 138 |
| 660/3-73-025 | 1BA023 | **NTA and Mercury in Artificial Stream Systems** BY H. J. Kania, and R. J. Beyers, Georgia, University of Athens, GA **ORDER FROM: GPO-**EP1.23: 660/3-73-025 $0.70 **NTIS-PB** 234 459 |
| 660/3-74-001 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 660/3-74-002 | 1BA023 | **Pesticides in the Illinois Waters of Lake Michigan** BY R. A. Schacht, Illinois Environmental Protection Agency Chicago, IL **ORDER FROM: GPO-**EP1.23: 660/3-74-002 $1.25 |
| 660/3-74-003 | 1BA022 | **Biologically Allowable Thermal Pollution Limits, Parts I and II** BY W. Drost-Hansen, and A. Thorhaug, Miami, University of Coral Gables, FL **ORDER FROM: GPO-**EP1.23: 660/3-74-003 $1.20 **NTIS-PB** 235 715/AS $3.20 |
| 660/3-74-004a | 1BA025 | **Turbulent Diffusion in Liquid Jets: Part I** BY C. H. Tinsley, W. S. Stevenson, and V. W. Goldschmidt, Purdue University Lafayette, IN **ORDER FROM: GPO-**EP1.23: 660/3-74-004a $1.15 **NTIS-PB** 234 170 |
| 660/3-74-004b | 1BA025 | **Turbulent Diffusion in Liquid Jets: Final Report** BY S. C. Choung, and V. W. Goldschmidt, Purdue University Lafayette, IN **ORDER FROM: GPO-**EP1.23: 660/3-74-004b $1.70 **NTIS-PB** 234 171 |
| 660/3-74-005 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 660/3-74-006 | 1BA021 | **Culturing and Ecology of Diaptomus Clavipes and Cyclops Vernalis** BY A. Robertson, C. W. Gehrs, B. D. Hardin, and G. W. Hunt, Oklahoma, University of Norman, OK **ORDER FROM: GPO-**EP1.23: 660/3-74-006 $2.55 **NTIS-PB** 234 613/AS |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 660/3–74–007 | 1BA031 | **Biological Control of Aquatic Vegetation** BY T. Sturrock, Florida Atlantic University Boca Raton, FL **ORDER FROM: NTIS-PB** 238 909/AS $5.25 |
| 660/3–74–008 | 1BA021 | **Low Winter Dissolved Oxygen in Some Alaskan Rivers** Arctic Environmental Research Laboratory, EPA College, AK **ORDER FROM: GPO-**EP1.23: 660/3–74–008 $0.80 **NTIS-PB** 234 443 |
| 660/3–74–009 | 1BA021 | **Environmental Guidelines for Development Roads in the Subarctic** BY F. B. Lotspeich, Arctic Environmental Research Laboratory, EPA College, AK BY A. E. Helmers, U.S. Forest Service Fairbanks, AK **ORDER FROM: GPO-**EP1.23/2:660/3–74–009 $1.15 **NTIS-PB** 235 932/AS |
| 660/3–74–010 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 660/3–74–011 | 1AA006 | **Bio-Environmental Impact of Air Pollution from Fossil Fuel Power Plants** National Ecological Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23: 660/3–74–011 $0.75 **NTIS-PB** 237 720/AS $3.50 |
| 660/3–74–012 | 1AA006 | **Heavy Metal Accumulation in Soil and Vegetation From Smelter Emissions** BY H. C. Ratsch, National Ecological Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23: 660/3–74–012 $0.80 **NTIS-PB** 237 719/AS |
| 660/3–74–013 | 1EA077 | **Theoretical Model and Solubility Characteristics of Aroclor R 1254 in Water: Problems Associated with Low-Solubility Compounds in Aquatic Toxicity Test — Abstracted 600/9–75–001a** —BY W. P. Schoor, Gulf Breeze Environmental Research Laboratory, EPA Gulf Breeze, FL **ORDER FROM: NTIS-PB** 240 550/AS $3.75 |
| 660/3–74–014 | 1BA032 | **Studies on Effects of Thermal Pollution in Biscayne Bay in Florida** BY M. Roessler, and D. C. Jabb, Rosenstiel School of Marine and Atmospheric Science, University of Miami Miami, FL **ORDER FROM: GPO-**EP1.23: 660/3–74–014 $2.25 **NTIS-PB** 239 328/AS |
| 660/3–74–015 | 1BA031 | **Sediments and Sediment-Water Nutrient Interchanges in Upper Klamath Lake, Oregon** BY A. R. Gahler, C. F. Powers, and W. D. Sanville, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23: 660/3–74–015 $1.10 **NTIS-PB** 238 470/AS |
| 660/3–74–016 | 1BA025 | **Significance and Control of Waste Water Floatables in Coastal Waters** BY R. E. Selleck, L. Bricewell, and R. Caster, California, University of Berkeley, CA **ORDER FROM: GPO-**EP1.23: 660/3–74–016 $2.00 **NTIS-PB** 239 938 $5.75 |
| 660/3–74–017 | 1BA031 | **Silt Removal From a Lake Bottom — Abstracted 600/9–75–001a** —Lake Herman Development Associates, Inc. Madison, SD **ORDER FROM:** PB No. Pending |
| 660/3–74–018 | 1AA006 | **Sulfur Content of Douglas Fir Foliage Near a Paper Mill** BY H. C. Ratsch, National Ecological Research Laboratory, EPA Corvallis, OR **ORDER FROM: GPO-**EP1.23: 660/3–74–018 $0.65 **NTIS-PB** 237 755/AS |
| 660/3–74–019 | 1BA031 | **Research and Development of a Selective Algaecide to Control Nuisance Algal Growth-Phase III** BY W. F. McIlhenny, Dow Chemical Company Freeport, TX **ORDER FROM: GPO-**EP1.23: 660/3–74–019 $2.95 **NTIS-PB** 238 487/AS |
| 660/3–74–020 | 1BA031 | **Estimating Nutrient Loadings of Lakes from Non-Point Sources** BY P. D. Uttormark, Wisconsin, University of Madison, WI **ORDER FROM: GPO-**EP1.23: 660/3–74–020 $1.90 **NTIS-PB** 238 355/AS $3.90 |
| 660/3–74–021 | 1BA023 | **Mercury in the Aquatic Systems: Methelation, OxidationReduction; in Bio Accumulation** BY H. W. Holm, and M. F. Cox, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: GPO-**EP1.23: 660/3–74–021 $1.05 **NTIS-PB** 239 329/AS |
| 660/3–74–022 | 1BA031 | **An Investigation of Ion Removed From Water and Wastewater** BY R. J. Starkey, General Electric Company Philadelphia, PA **ORDER FROM: GPO-**EP1.23: 660/3–74–022 $1.95 |
| 660/3–74–023 | 1BA031 | **Limnological Studies of Flat-head, Montana: A Status Report** BY A. R. Gaufin, G. W. Prescott, and J. F. Tibbs, Montana, University of Missoula, MT **ORDER FROM:** Pending |
| 660/3–74–024 | 1EA487 | **Conceptual Model for the Movement of Pesticides Through the Environment** BY J. W. Gillett, J. Hill IV, and A. W. Jaryinen, National Ecological Research Laboratory, EPA Corvallis, OR BY W. P. Schoor, Gulf Breeze Environmental Research Laboratory Gulf Breeze, FL **ORDER FROM: GPO-**EP1.23: 660/3–74–024 Price Pending |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 660/3–74–025 | 1BA023 | **Fate of Select Pesticides in the Aquatic Environment** BY J. R. Sanborn, Illinois, University of, Illinois Natural History Survey Urbana, IL **ORDER FROM: GPO**–EP1.23: 660/3–74–025 $1.55 **NTIS–PB** 239 749/AS |
| 660/3–74–026 | 1BA022 | **Development of Sample Preparation Methods for Development of Marine Organisms** BY H. C. McKee, and D. S. Tarazi, Southwest Research Institute Houston, TX **ORDER FROM: GPO**–EP1.23: 660/3–74–026 $1.05 **NTIS–PB** 234 201 $3.75 |
| 660/3–74–027 | 1BA022 | **Pharmacokinetics of Toxic Elements in Rainbow Trout** BY E. J. Massaro, New York, University of Buffalo, NY **ORDER FROM: NTIS–PB** 242 124/AS $3.75 |
| 660/3–74–028 | 1BA026 | **Cladophora Distribution in Lake Ontario (IFYGL) — Abstracted 600/9–75–001a** —BY C. T. Wezernak, D. R. Lezenga, and F. C. Polcyn, Environmental Research Institute of Michigan Ypsilanti, MI **ORDER FROM:** Pending |
| 660/3–74–029 | 1BA026 | **Future Dredging Quantities in the Great Lakes — Abstracted 600/9–75–001a** —BY C. N. Raphael, E. Jaworski, C. Ojala, and D. S. Turner, Eastern Michigan University Ypsilanti, MI **ORDER FROM: NTIS–PB** 240 741/AS $7.50 |
| 660/3–74–030 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 660/3–74–031 | 1BA022 | **Environmental Requirements of Selected Estuarine Ciliated Protozoa** BY A. C. Borror, New Hampshire, University of Durham, NH **ORDER FROM: NTIS–PB** 242 125/AS $4.25 |
| 660/3–74–032 | 1BA031 | **Nutrient Inactivation As A Lake Restoration Procedure — I. Laboratory Investigations** BY S. A. Peterson, W. D. Sanville, F. S. Stay, and C. F. Powers, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM:** Pending |
| 660/3–74–033 | 1BA024 | **Salt Water Detection in the Cimarron Terrace, Oklahoma — Abstracted 600/9–75–001a** —Oklahoma Water Resources Board Oklahoma City, OK **ORDER FROM:** Pending |
| 660/3–74–034 | 1BA031 | **Eutrophication of Lake Tahoe Emphasizing Water Quality** BY C. R. Goldman, California, University of Davis, CA **ORDER FROM:** Pending |
| 660/3–75–001 | 1EA077 | **Impact of the Use of Microorganisms on the Aquatic Environment — Abstracted 600/9–75–001a** —BY D. G. Ahearn, Georgia State University Atlanta, GA BY A. W. Bourquin, Gulf Breeze Environmental Research Laboratory, EPA Gulf Breeze, FL BY S. P. Meyers, Louisiana State University Baton Rouge, LA **ORDER FROM: NTIS–PB** 240 159/AS $8.50 |
| 660/3–75–002 | 1BA032 | **Effect of Meteorological Variables on Temperature Changes in Flowing Streams — Abstracted 600/9–75–001a** —BY R. W. Troxler, and E. L. Thackston, Vanderbilt University Nashville, TN **ORDER FROM:** Pending |
| 660/3–75–003 | 1BA031 | **Eutrophication of Surface Waters—Lake Tahoe's Indian Creek Reservoir — Abstracted 600/9–75–001a** —Lake Tahoe Area Council South Lake Tahoe, CA **ORDER FROM: NTIS–PB** 240 725/AS $7.00 |
| 660/3–75–004 | 1BA026 | **Phytoplankton Composition and Abundance in Lake Ontario During IFYGL — Abstracted 600/9–75–001a** —BY E. F. Stoermer, M. M. Bowman, J. C. Kingston, and A. L. Schaedel, Michigan, University of Ann Arbor, MI **ORDER FROM: NTIS–PB** 241 009/AS $10.25 |
| 660/3–75–005 | 1BA026 | **Mathematical Modeling of Phytoplankton in Lake Ontario — Abstracted 600/9–75–001a** —BY R. V. Thomann, R. P. Winfield, and D. M. DiToro, Manhattan College Bronx, NY **ORDER FROM: NTIS–PB** 241 046/AS $7.00 |
| 660/3–75–006 | 1BA026 | **Phosphorus Uptake and Release by Lake Ontario Sediments — Abstracted 600/9–75–001a** —BY R. T. Bannerman, D. E. Armstrong, R. F. Harris, and G. C. Holdren, Wisconsin, University of Madison, WI **ORDER FROM: NTIS–PB** 240 614/AS $4.25 |
| 660/3–75–007 | 1BA023 | **Microbial Degradation and Accumulation of Pesticides in Aquatic Systems** BY D. F. Paris, D. L. Lewis, Jr., J. T Barnett, and G. L. Baughman, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM: NTIS–PB** 241 293/AS $4.25 |
| 660/3–75–008 | 1BA031 | **Marine Algal Assay Procedure Bottle Test — Abstracted 600/9–75–001a** —National Environmental Research Center, EPA Corvallis, OR **ORDER FROM: NTIS–PB** 239 709/AS $4.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 660/3-75-009 | 1BA021 | **Methods for Acute Toxicity Tests with Fish, Macroinvertebrates, and Amphibians — Abstracted 600/9-75-001a** —National Water Quality Laboratory, EPA Duluth, MN **ORDER FROM: NTIS-PB** 242 105/AS $4.25 |
| 660/3-75-010 | 1BA021 | **Studies to Determine Methods for Culturing Three Freshwater Zooplankton Species — Abstracted 600/9-75-001a** —BY D. B. Martin, and J. F. Novotny, U.S. Fish and Wildlife Service Yankton, SD **ORDER FROM:** Pending |
| 660/3-75-011 | 1BA021 | **Acquisition and Culture of Research Fish — Abstracted 600/9-75-001a** —BY J. L. Brauhn, and R. A. Schoettger, U.S. Department of Interior Columbia, MO **ORDER FROM:** Pending |
| 660/3-75-012 | 1BA023 | **Modeling Dynamics of Biological and Chemical Components of Aquatic Ecosystems — Abstracted 600/9-75-001a** —BY R. R. Lassiter, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM:** Pending |
| 660/3-75-013 | 1BA025 | **Analysis of the Dynamics of DDT in Marine Sediments — Abstracted 600/9-75-001a** —BY J. H. Phillips, E. E. Haderlie, and W. L. Lee, Stanford University Pacific Grove, CA **ORDER FROM: NTIS-PB** 238 511/AS $5.25 |
| 660/3-75-014 | 1BA032 | **Flow Establishment and Initial Entrainment of Heated Water Surface Jets — Abstracted 600/9-75-001a** — BY H. Stefan, L. Bergstedt, and E. Mrosla, Minnesota, University of Minneapolis, MN **ORDER FROM:** Pending |
| 660/3-75-015 | 1EA077 | **Effects of Mirex and Methoxychlor on Striped Mullet, Mugil cephalus L. — Abstracted 600/9-75-001a** —BY C. E. Nash, and J. R. Sylvester, Oceanic Foundation Waimanalo, HI **ORDER FROM: NTIS-PB** 241 635/AS $3.75 |
| 660/3-75-016 | 1BA022 | **Toxicity of Selected Pesticides to the Bay Mussel (Mytilus edulis)** BY D. H. Liu, and J. M. Lee, Stanford Research Institute Menlo Park, CA **ORDER FROM:** Pending |
| 660/3-75-017 | 1BA021 | **Temperature Effects on Eggs and Fry of Percoid Fishes** BY L. L. Smith Jr., and W. M. Koenst, Minnesota, University of St. Paul, MN **ORDER FROM:** Pending |
| 660/3-75-018 | 1BA024 | **Ground-Water Pollution Problems in the Northwestern United States** BY F. Van der Leeden, L. A. Cerrillo, and D. W. Miller, Geraghty and Miller, Inc. Port Washington, NY **ORDER FROM:** Pending |
| 660/3-75-019 | 1BA021 | **Chena River—A Study of a Subarctic Stream** BY P. J. Frey, E. W. Mueller, and E. C. Berry, Arctic Environmental Research Laboratory, EPA College, AK **ORDER FROM: NTIS-PB** 197 857 $7.00 |
| 660/3-75-020 | 1BA021 | **Effects of Forest Fires on Water Quality in Interior Alaska** BY F. B. Lotspeich, E. W. Mueller, and P. J. Frey, Arctic Environmental Research Laboratory, EPA College, AK **ORDER FROM: NTIS-PB** 241 922/AS $5.25 |
| 660/3-75-021 | 1BA026 | **Zooplankton Production in Lake Ontario as Influenced by Environmental Perturbations** BY D. C. McNaught, M. Buzzard, and S. Levine, New York, State University of Albany, NY **ORDER FROM:** Pending |
| 660/3-75-022 | 1BA026 | **Chlorinated Hydrocarbons in the Lake Ontario Ecosystem (IFYGL)** BY C. L. Haile, G. D. Veith, G. F. Lee, and W. C. Boyle, Wisconsin, University of Madison, WI **ORDER FROM:** Pending |
| 660/3-75-023 | 1BA022 | **Second Annotated Bibliography on Biological Effects of Metals in Aquatic Environments** BY R. Eisler, and M. Wapner, National Marine Water Quality Laboratory, EPA Narragansett, RI **ORDER FROM:** Pending |
| 660/3-75-024 | 1EA077 | **Effect of Mirex and Carbofuran on Estuarine Microorganisms** BY L. R. Brown, E. G. Alley, and D. W. Cook, Mississippi State University Jackson, MS **ORDER FROM:** Pending |
| 660/4-75-001 | 1BA027 | **Determination of Molecular Hydrogen Sulfide — Abstracted 600/9-75-001a** —BY T. B. Hoover, Southeast Environmental Research Laboratory, EPA Athens, GA **ORDER FROM:** Pending |
| 660/4-75-002 | 1BA027 | **Aqueous Odor Thresholds of Organic Pollutants in Industrial Effluents — Abstracted 600/9-75-001a** —BY D. A. Lillard, and J. J. Powers, Georgia, University of Athens, GA **ORDER FROM:** Pending |
| 660/9-74-001 | 1RW103 | **Bibliography of Publications and Reports of the Pacific Northwest Environmental Research Laboratory** BY B. McCauley, Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR **ORDER FROM:** Library, NERC-Corvallis, 200 S.W. 35th, Corvallis, OR 97330 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 660/9-74-002 | 1BB045 | **Great Lakes Water Quality — Status of Pertinent EPA Research — Abstracted 600/9-75-001a** —BY A. F. Bartsch, C. Frank, and S. Peterson, National Environmental Research Center, EPA Corvallis, OR **ORDER FROM:** NERC – Corvallis, 200 S. W. 35th, Corvallis, OR 97330 |
| 670/1-73-001 | | **670/1-73-001 thru 670/1-73-035 are Unassigned numbers and will remain Unassigned ORDER FROM:** (Unassigned) |
| 670/1-73-036 | 1RA103 | **Annual Report for Calendar Year 1972, Environmental Toxicology Research** National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM:** NERC, Cincinnati, OH 45268 |
| 670/1-74-001 | 1CA046 | **Pricing for Water Supply: Its Impact on Systems Management** BY R. M. Clark, and H. C. Goddard, National Environmental Research Center, Program Coordination Staff Cincinnati, OH **ORDER FROM: NTIS-PB** 231 073/AS $3.25 |
| 670/2-73-001 | 1DB064 | **Physical, Chemical and Microbiological Methods of Solid Waste Testing** BY D. F. Bender, M. L. Peterson, and H. Stierli, Solid Waste Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 220 479 $6.75 |
| 670/2-73-002 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-003 | 1BA027 | **Viruses in Waste Renovated and Other Viruses – 1972 Literature Abstracts** BY G. Berg, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM:** NERC-CINCINNATI, OHIO 45268 |
| 670/2-73-004 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-005 | 1DB314 | **Utilization of Bark Waste** BY R. A. Currier, and M. L. Laver, Oregon State University, School of Forestry Corvallis, OR **ORDER FROM: NTIS-PB** 221 876 $7.00 |
| 670/2-73-006 | 1DB063 | **Investigation of Corrosion Deposition Phenomena on Gas Turbine Blades** BY L. R. Fleischer, Westinghouse Research Laboratories Pittsburgh, PA **ORDER FROM: NTIS-PB** 221 095 $3.75 |
| 670/2-73-007 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-008 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-009 | 1DB314 | **Biological Conversion of Animal Wastes to Nutrients** BY B. F. Miller, Colorado State University, Department of Avian Science Fort Collins, CO **ORDER FROM: NTIS-PB** 221 171 $4.75 |
| 670/2-73-010 | 1DB314 | **Preparation and Evaluation of Activated Carbon Produced from Municipal Refuse** BY M. K. Stevenson, J. O. Leckie, and R. Eliassen, Stanford University, Department of Civil Engineering Stanford, CA **ORDER FROM: NTIS-PB** 221 172 $5.75 |
| 670/2-73-011 | 1DB314 | **Acid Hydrolysis of Cellulose in Refuse to Sugar and Its Fermentation to Alcohol** BY A. O. Converse, H. E. Grethlein, S. Karandikar, and S. Kuhrtz, Dartmouth College Hanover, NH **ORDER FROM: NTIS-PB** 221 239 $5.25 |
| 670/2-73-012 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-013 | 1DB314 | **Analysis of the Abandoned Automobile Problem** Booz-Allen Applied Research, Inc. Bethesda, MD **ORDER FROM: NTIS-PB** 221 879 $6.00 |
| 670/2-73-014 | 1DB311 | **Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume I** Booz-Allen Applied Research, Inc. Bethesda, MD **ORDER FROM: NTIS-PB** 221 465 $10.60 |
| 670/2-73-015 | 1DB311 | **Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume II** Booz-Allen Applied Research, Inc. Bethesda, MD **ORDER FROM: NTIS-PB** 221 466 $12.50 |
| 670/2-73-016 | 1DB311 | **Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume III** Booz-Allen Applied Research, Inc. Bethesda, MD **ORDER FROM: NTIS-PB** 221 467 $10.60 Three Volume Set – PB 221 464 $21.00 |
| 670/2-73-017 | 1DB064 | **Municipal Waste Disposal by Shipborne Incineration and Sea-Disposal of Residues** BY M. W. First, Harvard University School of Public Health Boston, MA **ORDER FROM: NTIS-PB** 221 684 $32.25 |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 670/2-73-018 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-019 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-020 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-021 | 1DB064 | **Preventing Landfill Leachate Contamination of Water** BY E. J. Wren, Gulf South Research Institute Baton Rouge, LA **ORDER FROM: NTIS-PB** 222 468 $5.25 |
| 670/2-73-022 | 1BB043 | **Evaluation of the Bio-Disc Treatment Process for Summer Camp Application** BY W. A. Sack, and S. A. Phillips, West Virginia University Morgantown, VA **ORDER FROM: GPO-**EP1.23/2:670/2-73-022 $1.05 **NTIS-PB** 225 126/2AS |
| 670/2-73-023 | 1DB063 | **Incineration of Bulky Refuse Without Prior Shredding** BY E. L. Kaiser, New York University, School of Engineering and Science, Department of Chemical Engineering Bronx, NY **ORDER FROM: NTIS-PB** 221 731 $4.75 |
| 670/2-73-024 | 1BB033 | **Instream Aeration to Control Dissolved Sulfide in Sanitary Sewers** BY R. L. Condon Jr., De Laureal Engineers, Inc. New Orleans, LA **ORDER FROM: NTIS-PB** 223 342 $4.75 |
| 670/2-73-025 | 1DB063 | **Recirculating Waste System for Swine Units** BY J. R. Miner, Iowa State University, Department of Agricultural Engineering Ames, IA **ORDER FROM: NTIS-PB** 221 621 $14.50 |
| 670/2-73-026 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-027 | 1BB043 | **Rotating Biological Disk Wastewater Treatment Process – Pilot Plant Evaluation** BY W. N. Torpey, H. Heukelekian, and A. J. Kaplovsky, Rutgers University New Brunswick, NJ **ORDER FROM: NTIS-PB** 232 133/AS $8.50 |
| 670/2-73-028 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-029 | 1BB043 | **Disinfection of Sewage Effluents** BY F. W. Sollo Jr., H. F. Mueller, and T. E. Larson, Illinois, University of, Illinois State Water Survey Urbana, IL **ORDER FROM: NTIS-PB** 222 355 $4.75 |
| 670/2-73-030 | 1DB314 | **Radiolytic Hydrolysis of Cellulose** BY J. A. Kelly, Virginia, University of Charlottesville, VA **ORDER FROM: NTIS-PB** 221 877 $3.25 |
| 670/2-73-031 | 1BB043 | **U-Tube Aeration** BY R. C. Mitchell, North American Rockwell Corporation Canoga Park, CA **ORDER FROM: GPO-**EP1.23/2:670/2-73-031 $2.00 **NTIS-PB** 228 127/AS |
| 670/2-73-032 | 1DB063 | **First Annual Progress Report on a Study of Corrosion in Municipal Incinerators** BY D. A. Vaughan, and P. D. Miller, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 221 851 $3.75 |
| 670/2-73-033 | 1BB043 | **Hydrogen Peroxide Cures Filamentous Growth in Activated Sludge** BY C. A. Cole, J. B. Stamberg, and D. F. Bishop, D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC **ORDER FROM: GPO-**EP1.23/2:670/2-73-033 $0.65 **NTIS-PB** 231 848 |
| 670/2-73-034 | 1DB311 | **Wood Waste Reuse in Controlled Release Pesticides** BY G. G. Allan, Washington, University of Seattle, WA **ORDER FROM: NTIS-PB** 222 051 $4.85 |
| 670/2-73-035 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-036 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-037 | 1BB033 | **Alum Addition to Activated Sludge With Tertiary Solids Removal** BY J. B. Stamberg, and D. F. Bishop, D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC **ORDER FROM: GPO-**EP1.23/2:670/2-73-037 $0.65 **NTIS-PB** 225 028/0AS |
| 670/2-73-038 | 1DB064 | **Use of Domestic Waste Glass for Urban Paving** BY W. R. Malisch, D. E. Day, and B. G. Wixson, Missouri, University of, Department of Civil Engineering Rolla, MO **ORDER FROM: NTIS-PB** 222 052 $5.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-73-039 | 1DB314 | **Pyrolysis of Solid Municipal Wastes** BY D. A. Hoffman, San Diego Utilities Department San Diego, CA **ORDER FROM: NTIS-PB** 222 015 $4.85 |
| 670/2-73-040 | 1BB043 | **Nitrogen Removal By Ammonia Stripping** BY T. P. O'Farrell, D. F. Bishop, and A. H. Cassel, D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC **ORDER FROM: GPO-**EP1.23/2:670/2-73-040 $0.65 **NTIS-PB** 231 371 |
| 670/2-73-041 | 1DB063 | **Effect of Processing Poultry Manure on Disease Agents** BY J. R. Howes, C. F. Hall, and W. F. Krueger, Texas A&M University College Station, TX **ORDER FROM: NTIS-PB** 222 148 $3.75 |
| 670/2-73-042 | 1BB033 | **Activated Sludge Process Using Pure Oxygen** BY E. A. Wilcox, and S. O. Akinbami, Union Carbide Corporation Tonawanda, NY **ORDER FROM: GPO-**EP1.23/2:670/2-73-042 $0.95 **NTIS-PB** 235 572/AS |
| 670/2-73-043 | 1BB043 | **Summary Report – Pilot Plant Studies on Dewatering Primary Digested Sludge** BY J. D. Parkhurst, Los Angles County Sanitation District Los Angeles, CA **ORDER FROM: GPO-**EP1.23/2:670/2-73-043 $2.10 **NTIS-PB** 224 798/AS |
| 670/2-73-044 | 1BB043 | **Mathematical Model for Post Aeration** BY R. Smith, R. G. Eilers, and E. D. Hall, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 222 031 $3.75 |
| 670/2-73-045 | 1BB043 | **Mathematical Model for Aerobic Digestion** BY R. Smith, R. G. Eilers, and E. D. Hall, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 222 029 $3.75 |
| 670/2-73-046 | 1BB043 | **Design and Simulation of Equalization Basins** BY R. Smith, R. G. Eilers, and E. D. Hall, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 222 000 $4.50 |
| 670/2-73-047a | 1BB043 | **Methods for Improvement of Trickling Filter Plant Performance, Part I – Mechanical and Biological Optima** BY J. C. Brown, North Carolina, University of Chapel Hill, NC **ORDER FROM: GPO-**EP1.23/2:670/2-73-047a $2.30 **NTIS-PB** 224 715/AS |
| 670/2-73-047b | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-048 | 1DB063 | **Hospital Solid Waste Disposal in Community Facilities** BY A. F. Iglar, and R. G. Bond, Minnesota, University of, Division of Environmental Health Minneapolis, MN **ORDER FROM: NTIS-PB** 222 018 $9.00 |
| 670/2-73-049 | 1DB063 | **Combustion Products from the Incineration of Plastics** BY E. A. Boettner, G. Ball, and B. Weiss, Michigan, University of Ann Arbor, MI **ORDER FROM: NTIS-PB** 222 001 $6.25 |
| 670/2-73-050 | 1BB043 | **200 MGD Activated Sludge Plant Removes Phosphorus by Pickle Liquor** BY R. D. Leary, Milwaukee, Sewerage Commission of the City of Milwaukee, WI **ORDER FROM: GPO-**EP1.23/2:670/2-73-050 $1.50 **NTIS-PB** 228 561/AS |
| 670/2-73-051 | 1DB063 | **Survival of Pathogens in Animal Manure Disposal** BY S. L. Diesch, B. S. Pomeroy, and E. R. Albred, Minnesota, University of St. Paul, MN **ORDER FROM: NTIS-PB** 222 337 $5.75 |
| 670/2-73-052 | 1DB314 | **Nitrite-Accelerated Photochemical Degradation of Cellulose as a Pretreatment for Microbiological Conversion to Protein** BY A. Fookson, and G. Frohnsdorff, Gillette Research Institute Rockville, MD **ORDER FROM: NTIS-PB** 222 115 $5.25 |
| 670/2-73-053A | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume I – Summary Report** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 580/AS $7.25 |
| 670/2-73-053A-P | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume I thru Volume XVI** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 579-SET/AS $100.00 (entire 16 volume set) |
| 670/2-73-053B | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume II – Toxicologic Summary** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 581/AS $7.50 |

## BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-73-053C | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume III – Disposal Process Discriptions: Ultimate Disposal Incineration, and Pyrolysis Processes** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 582/AS $8.50 |
| 670/2-73-053D | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volum IV – Disposal Process Descriptions: Biological and Miscellaneous Waste Treatment Processes** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 583/AS $5.75 |
| 670/2-73-053E | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume V – National Disposal Site Candidate Waste Stream Constituent Profile Reports – Pesticides and Cyanide Compounds** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 584/AS $5.75 |
| 670/2-73-053F | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VI – National Disposal Site Candidate Waste Stream Constituent Profile Report – Mercury, Arsenic, Chromium and Cadmium Compounds** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 585/AS $7.25 |
| 670/2-73-053G | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VII – National Disposal Site Candidate Waste Stream Constituent Profile Report – Propellants, Explosives, and Chemical Warfare Materiel** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 586/AS $8.75 |
| 670/2-73-053H | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VIII – National Disposal Site Candidate Waste Stream Constituent Profile Report – Miscellaneous Inorganic and Organic Compounds** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 587/AS $4.75 |
| 670/2-73-053I | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume IX – National Disposal Site Candidate Waste Stream Constituent Profile Report – Radioactive Materials** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 588/AS $6.25 |
| 670/2-73-053J | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume X – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Organic Compounds** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 589/AS $9.25 |
| 670/2-73-053K | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XI – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Organic Compounds** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 590/AS $8.50 |
| 670/2-73-053L | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XII – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Inorganic Compounds** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 591/AS $9.50 |
| 670/2-73-053M | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XIII – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Inorganic Compounds** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 592/AS $9.25 |
| 670/2-73-053N | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XIV – Summary of Waste Origins, Forms and Quantities** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 593/AS $6.25 |
| 670/2-73-053O | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XV – Research and Development Plans** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 594/AS $5.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-73-053P | 1DB311 | **Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XVI – References** BY R. S. Ottinger, TRW Systems Group Redondo Beach, CA **ORDER FROM: NTIS-PB** 224 595/AS $11.25 |
| 670/2-73-054 | 1BB040 | **Gas Requirements to Pressurize Abandoned Deep Mines** BY J. D. Robins, Pennsylvania, State of, Department of Environmental Resources Pittsburgh, PA Cyrus Wm. Rice Division, NUS Corporation Pittsburgh, PA **ORDER FROM: GPO-**EP1.23/2:670/2-73-054 $2.00 **NTIS-PB** 224 831/6AS |
| 670/2-73-055 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-056 | 1DB314 | **Problems and Opportunities in Management of Combustible Solid Wastes** International Research and Technology Corporation Washington, DC **ORDER FROM: NTIS-PB** 222 467 $12.25 |
| 670/2-73-057 | 1DB063 | **Study of Incinerator Residue Analysis of Water Soluble Components** BY R. J. Schoenberger, and P. W. Purdom, Drexel University, Environmental Engineering Program Philadelphia, PA **ORDER FROM: NTIS-PB** 222 458 $9.25 |
| 670/2-73-058 | 1BB033 | **Ammonia Nitrogen Removal By Breakpoint Chlorination** BY T. A. Pressley, D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC **ORDER FROM: GPO-**EP1.23/2:670/2-73-058 $0.95 **NTIS-PB** 231 378 |
| 670/2-73-059 | 1BB034 | **Dual Functioning Swirl Combined Sewer Overflow Regulator/ Concentrator** BY R. Field, Edison Water Quality Laboratory, EPA Edison, NJ **ORDER FROM: GPO-**EP1.23/2:670/2-73-059 $2.20 **NTIS-PB** 227 182/3 |
| 670/2-73-060 | 1BB033 | **Enhancing Trickling Filter Plant Performance By Chemical Precipitation** BY R. E. Derrington, D. H. Stevens, and J. E. Laughlin, Richardson, City of Richardson, TX **ORDER FROM: GPO-**EP1.23/2:670/2-73-060 $1.45 **NTIS-PB** 224 929/0AS |
| 670/2-73-061 | 1DB064 | **Thermophilic Aerobic Digestion of Organic Solid Wastes** BY J. F. Andrews, and K. Kambhu, Clemson University, Environmental Systems Engineering Department Clemson, NC **ORDER FROM: NTIS-PB** 222 396 $4.75 |
| 670/2-73-062 | 1BB043 | **Sludge Conditioning Using $SO_2$ and Low Pressure for Production of Organic Feed Concentrate** BY M. S. Weinburg, Foster D. Snell, Inc. Florham Park, NJ **ORDER FROM: NTIS-PB** 223 343 $6.25 |
| 670/2-73-063 | 1DB064 | **Composted Municipal Refuse as a Soil Amendment** BY C. C. Hortenstine, and D. F. Rothwell, Florida, University of Gainesville, FL **ORDER FROM: NTIS-PB** 222 422 $4.25 |
| 670/2-73-064 | 1BB043 | **Pilot – Demonstration Project for Industrial Reuse of Renovated Municipal Wastewater** BY G. A. Harstkatte Jr., Walnut Creek Central Control Sanitary District Walnut Creek, CA **ORDER FROM: GPO-**EP1.23/2:670/2-73-064 $1.55 **NTIS-PB** 224 507/AS |
| 670/2-73-065 | 1DB063 | **Studies on Modifications of Solid Industrial Wastes** BY C. S. Gove, and C. M. Antoni, Syracuse University, Department of Civil Engineering Syracuse, NY **ORDER FROM: NTIS-PB** 222 419 $7.00 |
| 670/2-73-066 | 1DB314 | **Study on Technical and Economic Feasibility of a Hydrogenation Process for Utilization of Waste Rubber** BY R. H. Wolk, and C. A. Battista, Hydrocarbon Research, Incorporated, Research and Development Laboratory Trenton, NJ **ORDER FROM: NTIS-PB** 222 694 $6.25 |
| 670/2-73-067 | 1BB034 | **Hypochlorination of Pollution Stormwater Pumpage at New Orleans** BY U. R. Pontuies, E. H. Pavia, and D. G. Crowder, Byrne Engineering Corporation New Orleans, LA **ORDER FROM: GPO-**EP1.23/2:670/2-73-067 $1.95 **NTIS-PB** 228 581/AS |
| 670/2-73-068 | 1BB041 | **Oil Recovery System Using Sorbent Material** BY G. D. Gumtz, and T. P. Meloy, Meloy Laboratories, Inc. Springfield, VA **ORDER FROM: GPO-**EP1.23/2:670/2-73-068 $4.00 **NTIS-PB** 229 576/AS |
| 670/2-73-069 | 1BB041 | **Fabric Boom Concept for Containment and Collection of Floating Oil** BY P. E. Bonz, Consultec, Inc. Rockville, MD **ORDER FROM: GPO-**EP1.23/2:670/2-73-069 $1.00 **NTIS-PB** 228 049/AS |
| 670/2-73-070 | 1BB033 | **Physical – Chemical Treatment of Raw Material Wastewater** BY D. F. Bishop, D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC **ORDER FROM: GPO-**EP1.23/2:670/2-73-070 $1.05 **NTIS-PB** 231 250/AS |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2–73–071 | 1BB034 | **Utilization of Trickling Filters for Dual Treatment of Dry and Wet Weather Flows** BY P. Honack, K. L. Zippler, and E. C. Herkert, Elson T. Killam Associates, Inc. Milburn, NJ **ORDER FROM: GPO-**EP1.23/2:670/2–73–071 $1.50 **NTIS-PB** 231 251/AS |
| 670/2–73–072 | 1DB063 | **Pneumo-Slurry Pipeline Collection and Removal of Municipal Solid Waste** BY I. Zandi, Pennsylvania, University of, Towne School of Civil and Mechanical Engineering Philadelphia, PA **ORDER FROM: NTIS-PB** 223 162 $8.25 |
| 670/2–73–073 | 1BB043 | **Activated Sludge Treatment Systems With Oxygen** BY J. B. Stanbery, D. F. Bishop, and A. B. Hais, D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC **ORDER FROM: GPO-**EP1.23/2:670/2–73–073 $0.90 **NTIS-PB** 231 379 |
| 670/2–73–074 | 1BB043 | **Study of Upflow Filter for Tertiary Treatment** BY J. E. Morrison, De Laureal Engineers, Inc. New Orleans, LA **ORDER FROM: GPO-**EP1.23/2:670/2–73–074 $5.25 **NTIS-PB** 223 354 |
| 670/2–73–075 | 1BB043 | **Laboratory Ozonation of Municipal Wastewater** BY S. G. Roan, D. F. Bishop, and T. A. Pressley, D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC **ORDER FROM: GPO-**EP1.23/2:670/2–73–075 $0.85 **NTIS-PB** 231 380 |
| 670/2–73–076 | 1BB043 | **Selective Nutrient Removal Secondary Effluent** BY J. L. Eisenmann, and J. D. Smith, Process Research, Inc. Cambridge, MA **ORDER FROM: GPO-**EP1.23/2:670/2–73–076 $1.75 **NTIS-PB** 228 108/AS |
| 670/2–73–077 | 1BB034 | **Combined Sewer Overflow Seminar Papers** Edison Water Quality Laboratory, EPA Edison, NJ **ORDER FROM: GPO-**EP1.23/2:670/2–73–077 $2.20 **NTIS-PB** 231 836 $7.25 |
| 670/2–73–078 | 1BB041 | **Treatment of Hazardous Material Spills With Floating Mass Transfer Media** BY B. W. Mercer, A. J. Shuckrow, and G. W. Dawson, Battelle Memorial Institute Richland, WA **ORDER FROM: GPO-**EP1.23/2:670/2–73–078 $1.25 **NTIS-PB** 228 050/AS |
| 670/2–73–079 | 1BA027 | **Atomic Absorption Analysis of Phosphates in Water** BY C. O. Hubber, Wisconsin, University of Milwaukee, WI **ORDER FROM: NTIS-PB** 223 338 $3.75 |
| 670/2–73–080 | 1BB040 | **Removal of Heavy Metals from Mine Drainage by Precipitation** BY L. W. Ross, Denver, University of Denver, CO **ORDER FROM: GPO-**EP1.23/2:670/2–73–080 $1.00 **NTIS-PB** 228 584/AS |
| 670/2–73–081 | 1BB040 | **Laboratory Study of Self-Sealing Limestone Plugs for Mine Openings** BY R. G. Penose Jr., Cyrus Wm. Rice Division, NUS Corporation Pittsburgh, PA BY I. Holuec, E.D. Appolonia Consulting Engineers, Inc. Pittsburgh, PA **ORDER FROM: GPO-**EP1.23/2:670/2–73–081 $2.25 **NTIS-PB** 228 586/AS |
| 670/2–73–082 | 1BB043 | **New Microbial Indicators of Wastewater Chlorination Efficiency** BY R. S. Englebrecht, D. H. Foster, E. D. Greening, and S. H. Lee, Illinois, University of Urbana, IL **ORDER FROM: GPO-**EP1.23/2:670/2–73–082 $1.15 **NTIS-PB** 234 169 |
| 670/2–73–083 | 1DB063 | **Study of Institutional Solid Wastes** BY J. C. Burchinal, West Virginia University, Department of Civil Engineering Morgantown, WV **ORDER FROM: NTIS-PB** 223 345 $7.50 |
| 670/2–73–084 | 1BB041 | **Oil Recovery System Utilizing Polyurethane Foam—A Feasibility Study** BY R. A. Cochran, J. P. Fraser, and D. P. Hemphill, Shell Development Company Houston, TX **ORDER FROM: GPO-**EP1.23/2:670/2–73–084 $2.35 **NTIS-PB** 231 838 |
| 670/2–73–085 | 1DB063 | **Poultry Manure Disposal by Plow-Furrow-Cover** Rutgers University, College of Agriculture and Environmental Science New Brunswick, NJ **ORDER FROM: NTIS-PB** 223 430 $5.50 |
| 670/2–73–086 | 1DB311 | **Public Attitudes Toward Hazardous Waste Disposal Facilities** BY L. L. Lackey, T. O. Jacobs, and S. R. Stewart, Human Resources Research Organization Columbus, GA **ORDER FROM: NTIS-PB** 223 638/AS $7.00 |
| 670/2–73–087 | 1DB063 | **Incineration of Plastics Found in Municipal Wastes** BY R. W. Heimburg, Syracuse University Research Corporation Syracuse, NY **ORDER FROM: NTIS-PB** 223 651/AS $7.50 |
| 670/2–73–088 | 1BB038 | **Demonstration of a Non-Aqueous Sewage Disposal System** BY F. L. Matthew, and E. E. Neshein, Black Hill Conservancy Sub-District Rapid City, SD **ORDER FROM: GPO-**EP1.23/2:670/2–73–088 $1.60 **NTIS-PB** 231 338/AS |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-73-089A | 1DB063 | **Design and Control of Incinerators, Volume I** BY A. F. Sarofim, Massachusetts Institute of Technology, Chemical Engineering Department Cambridge, MA **ORDER FROM: NTIS-PB** 223 626/AS $7.00 |
| 670/2-73-089B | 1DB063 | **Design and Control of Incinerators, Volume II – Appendices** BY A. F. Sarofim, Massachusetts Institute of Technology, Chemical Engineering Department Cambridge, MA **ORDER FROM: NTIS-PB** 223 626/AS $6.50 |
| 670/2-73-090 | 1DB314 | **Utilization of Fibrous Wastes as Sources of Nutrients** BY J. M. Leatherwood, North Carolina State University, Department of Animal Science Raleigh, NC **ORDER FROM: NTIS-PB** 223 625/AS $3.00 |
| 670/2-73-091 | 1DB314 | **Metallurgical Upgrading of Automotive Scrap Steel** BY O. N. Carlson, and F. A. Schmidt, Ames Laboratory, U.S. Atomic Energy Commission, Metallurgy Division, Iowa State University Ames, IA **ORDER FROM: NTIS-PB** 223 740 $4.35 |
| 670/2-73-092 | 1BB040 | **Abatement of Mine Drainage Pollution By Underground Precipitation** BY C. K. Stoddard, Ralph M. Parsons Company Los Angeles, CA **ORDER FROM: GPO-**EP1.23/2;670/2-73-092 $1.55 **NTIS-PB** 229 407/AS |
| 670/2-73-093 | 1BB040 | **Appraisal of Neutralization Processes to Treat Coal Mine Drainage** BY H. L. Lovell, Pennsylvania State University University Park, PA **ORDER FROM: GPO-**EP1.23/2:670/2-73-093 $3.50 **NTIS-PB** 231 249/AS |
| 670/2-73-094 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-095 | 1DB314 | **Single-Cell Protein From Waste Cellulose** BY C. D. Callihan, and C. E. Dunlap, Louisiana State Unversity, Department of Chemical Engineering Baton Rouge, LA **ORDER FROM: NTIS-PB** 223 873/AS $3.75 |
| 670/2-73-096 | 1BB043 | **BOD, Solids and Nutrient Removal By Foam Flotation** BY E. R. Becker, San Jose Public Works Department, City of San Jose, CA **ORDER FROM: NTIS-PB** 232 184/AS $4.75 |
| 670/2-73-097 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-098 | 1BB033 | **Odors Emitted From Raw and Digested Sewage Sludge** BY B. A. Rains, M. J. De Primo, and J. L. Groseclose, St. Louis Sewer District, Metropolitan St. Louis, MO **ORDER FROM: GPO-**EP1.23/2:670/2-73-098 $1.15 **NTIS-PB** 232 369/AS |
| 670/2-73-099 | 1BB041 | **Investigation of Surface Films – Chesapeake Bay Entrance** BY W. G. MacIntyre, C. L. Smith, and J. C. Munday, Virginia Institute of Marine Science Gloucester Point, VA **ORDER FROM: GPO-**EP1.23/2:670/2-73-099 $2.05 **NTIS-PB** 232 968/AS |
| 670/2-73-100 | 1BB040 | **Applications of Reverse Osmosis to Acid Mine Drainage Treatment** BY R. C. Wilmoth, Crown Mine Drainage Control Field Site, EPA Rivesville, WV **ORDER FROM: GPO-**EP1.23/2:670/2-73-100 $2.00 **NTIS-PB** 232 449/AS |
| 670/2-73-101 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-102 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-73-103 | 1BB043 | **Ferric Chloride and Organic Polyelectrolytes for the Removal of Phosphorus** BY O. Green, D. Van Dam, B. LaBeau, T. L. Campbell, and S. L. Daniels, Grand Rapids, City of Grand Rapids, MI **ORDER FROM: GPO-**EP1.23/2:670/2-73-103 $1.55 **NTIS-PB** 239 866/AS $5.25 |
| 670/2-73-104 | 1BB043 | **Selected Abstracts for Instrumentation and Automation of Wastewater Facilities** BY A. E. Molvar, and J. F. Roesler, Raytheon Company, Environmental Systems Center Portsmouth, RI **ORDER FROM: NTIS-PB** 225 520/6AS $7.00 |
| 670/2-74-001 | 1BB040 | **Carbonate Bonding of Taconite Tailings** BY P. J. La Rosa, K. A. Ricciardello, and R. J. McGarvey, Applied Technology Corporation Pittsburgh, PA **ORDER FROM: GPO-**EP1.23/2:670/2-74-001 $1.00 **NTIS-PB** 232 370/AS |
| 670/2-74-002 | 1BB040 | **Feasibility Study of a New Surface Mining Method "Longwall Stripping"** BY H. F. Moomau, F. R. Zachar, and J. W. Leonard, Potomac Engineering and Surveying Petersburg, WV **ORDER FROM: GPO-**EP1.23/2:670/2-74-002 $1.15 **NTIS-PB** 233 146/AS |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2–74–003 | 1BB040 | **Mine Drainage Pollution Control Demonstration Grant Procedures and Requirement — Abstracted 600/9–75–001a** —BY F. J. Zaval, and R. Burns, Cyrus Wm. Rice Division, NUS Corporation Pittsburgh, PA **ORDER FROM: NTIS–PB** 240 692/AS $5.25 |
| 670/2–74–004 | 1BB043 | **Optimization and Design of an Oil/Activated Sludge Concentration Process** BY T. M. Rosenblatt, Esso Research and Engineering Company Linden, NJ **ORDER FROM GPO**-EP1.23/2:670/2–74–004 $1.40 **NTIS–PB** 234 173 |
| 670/2–74–005 | 1BB043 | **Fate and Effects of Trace Elements in Sewage Sludge When Applied to Agricultural Lands: A Literature Review Study** BY A. L. Page, California, University of Riverside, CA **ORDER FROM: NTIS–PB** 231 171/AS $4.50 |
| 670/2–74–006 | 1BB043 | **Costs of Filter Pressing Domestic Sewage Sludges** BY W. F. McMichael, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS–PB** 226 130/AS $3.75 |
| 670/2–74–007 | 1DB064 | **Physical, Chemical and Microbiological Methods of Solid Waste Testing: Four Additional Procedures** BY N. S. Ulmer, Solid and Hazardous Waste Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS–PB** 231 203/AS $3.75 |
| 670/2–74–008 | 1BB036 | **Metallic Recovery From Waste Waters Utilizing Cementation** BY O. P. Case, Anaconda American Brass Company Waterbury, CT **ORDER FROM: GPO**-EP1.23/2:670/2–74–008 $0.85 |
| 670/2–74–009 | 1BB040 | **Analysis of Pollution Control Costs** BY F. J. Doyle, G. Bhatt, and J. R. Rapp, Michael Baker Jr., Inc. Beaver, PA **ORDER FROM: GPO**-EP1.23/2:670/2–74–009 $3.20 **NTIS–PB** 233 026 $10.50 |
| 670/2–74–010 | 1BB043 | **Costs of Hauling and Land Spreading of Domestic Sewage Treatment Plant Sludge** BY W. F. McMichael, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS–PB** 227 005/AS $4.25 |
| 670/2–74–011 | 1BB043 | **Cost of Dissolved Air Flotation Thickening of Waste Activated Sludge at Municipal Sewage Treatment Plants** BY W. F. McMichael, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS–PB** 226 582/AS $2.75 |
| 670/2–74–012 | 1BB043 | **Adsorption from Aqueous Solution** BY W. J. Weber Jr., and P. J. Usinowicz, Michigan, University of, College of Engineering Ann Arbor, MI **ORDER FROM: NTIS–PB** 232 453/AS $15.00 |
| 670/2–74–013 | 1BB041 | **State of Maryland Waste Oil Recovery and Reuse Program** BY E. J. Martin, and G. D. Gumtz, Environmental Quality Systems, Inc. Rockville, MD **ORDER FROM: GPO**-EP1.23/2:670/2–74–013 $2.70 **NTIS–PB** 234 446 $6.00 |
| 670/2–74–014 | 1DB314 | **Scrap Rubber Tire Utilization in Road Dressings** BY B. G. Brand, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS–PB** 232 559/AS $3.75 |
| 670/2–74–015 | 1DB314 | **Chemical Conversion of Wood and Cellulosic Wastes** BY F. Shafizadeh, and C. McIntyre, Montana, University of, Wood Chemistry Laboratory Missoula, MT **ORDER FROM: NTIS–PB** 229 246 $6.00 |
| 670/2–74–016 | 1DB314 | **Reclamation of Energy from Organic Waste** BY J. T. Pfeffer, Illinois, University of, Department of Civil Engineering Urbana, IL **ORDER FROM: NTIS–PB** 231 176/AS $4.75 |
| 670/2–74–017 | 1BB043 | **Evaluation and Demonstration of the Capillary Suction Sludge Dewatering Device** BY T. E. Lippert, and M. C. Skriba, Westinghouse Electric Corporation, Research and Development Center Pittsburgh, PA **ORDER FROM: NTIS–PB** 232 358/AS $4.00 |
| 670/2–74–018 | 1BB043 | **Bacterial Zoogloea Formation** BY R. F. Ung, and S. R. Farrah, Pennsylvania State University University Park, PA **ORDER FROM: NTIS–PB** 235 023 $4.00 |
| 670/2–74–019 | 1DB063 | **Feasibility of Hydraulic Transport and Treatment of Ground Household Refuse Through Sewers** BY A. R. Guzdar, and S. S. Rhee, Foster-Miller Associates, Inc. Waltham, MA **ORDER FROM: NTIS–PB** 229 256/AS $14.25 |
| 670/2–74–020 | 1DB063 | **Preliminary Design of a Household Refuse Grinder** BY A. T. Fisk, and A. R. Guzdar, Foster-Miller Associates, Inc. Waltham, MA **ORDER FROM: NTIS–PB** 239 914 $5.75 |
| 670/2–74–021 | 1DB063 | **Feasibility of Hydraulic Transport of Ground Household Refuse Through Sewer Appurtenances** BY D. A. Monaghan, and A. R. Guzdar, Foster-Miller Associates, Inc. Waltham, MA **ORDER FROM: NTIS–PB** 239 915 $5.75 |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 670/2–74–022 | 1BB034 | **Computer Management of a Combined Sewer System** Seattle, Municipality of Metropolitan Seattle, WA **ORDER FROM: GPO-**EP1.23/2:670/2–74–022 $5.30 **NTIS–PB** 235 717/AS $8.30 |
| 670/2–74–023 | 1BB040 | **Electrochemical Removal of Heavy Metals from Acid Mine Drainage** BY N. B. Franco, and R. A. Balouskus, Ecotrol, Inc. Columbia, MD **ORDER FROM: NTIS–PB** 232 764/AS $4.00 |
| 670/2–74–024A | 1DB314 | **Raw Materials Transportation Costs and Their Influence on the Use of Wastepaper and Scrap Iron and Steel, Volume I – Technical Discussion** BY J. F. Foran, A. T. Heenan, and R. G. Schweikhardt, Resource Planning Institute Cambridge, MA **ORDER FROM: NTIS–PB** 229 816/AS $5.75 |
| 670/2–74–024B | 1DB314 | **Raw Materials Transportation Costs and Their Influence on the Use of Wastepaper and Scrap Iron and Steel, Volume II – Appendices** BY J. F. Foran, A. T. Heenan, and R. G. Schweikhardt, Resource Planning Institute Cambridge, MA **ORDER FROM: NTIS–PB** 229 817/AS $4.00 |
| 670/2–74–025 | 1BB043 | **Effect of Carbon to Nitrogen Ratio on Activated Sludge Subsidence and Dewatering Characteristics** BY A. Geinopolos, Envirex, Inc. Milwaukee, WI **ORDER FROM: NTIS–PB** 230 941 $5.75 |
| 670/2–74–026 | 1BB034 | **SWIRL Concentrator as a Grit Separator Device** BY R. H. Sullivan, and M. M. Cohn, American Public Works Association Chicago, IL **ORDER FROM: NTIS–PB** 233 964/AS $4.50 |
| 670/2–74–027 | 1DB314 | **Chemical Conversion of Solid Waste to Useful Products** BY J. F. Barbour, R. R. Groner, and V. H. Freed, Oregon State University Corvallis, OR **ORDER FROM:** Pending |
| 670/2–74–028 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2–74–029 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2–74–030 | 1BB036 | **Waterborne Wastes of the Paint and Inorganic Pigments Industries** BY J. J. Barrett, G. A. Mornea, and J. J. Roden III, Southern Research Institute Birmingham, AL **ORDER FROM: NTIS–PB** 232 019/AS $4.00 |
| 670/2–74–031 | 1DB314 | **Infrared Spectral Sensor for Refuse Sorting** BY P. F. Winkler, Middlebury College, Physics Department Middlebury, VT **ORDER FROM: NTIS–PB** 229 901/AS $7.25 |
| 670/2–74–032 | 1BB043 | **Role of Polyelectrolytes in Filtration Processes** BY C. R. O'Melia, North Carolina, University of Chapel Hill, NC **ORDER FROM:** NERC-Cincinnati, OH 45268 |
| 670/2–74–033 | 1BB034 | **Manual for Deicing Chemical Storage and Handling** BY D. L. Richardson, Arthur D. Little, Inc. Cambridge, MA **ORDER FROM: NTIS–PB** 236 152/AS $3.70 |
| 670/2–74–034 | 1BB043 | **Off-the-Shelf Analyzers for Measuring Adenosine Triphosphate (ATP) in Activated Sludge** BY R. H. Wise, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS–PB** 231 345/AS $3.00 |
| 670/2–74–035a | 1DB314 | **First Annual Report: Routing of Solid Waste Collection Vehicles and Appendix A – A Linear Programming Approach for the Traveling Salesman Problem — Abstracted 600/9–75–001a** —BY M. Wathne, Illinois, University of Urbana, IL **ORDER FROM: NTIS–PB** 239 896/AS $4.25 |
| 670/2–74–035b | 1DB314 | **First Annual Report: Routing of Solid Waste Collection Vehicles and Appendix B – Optimal Routing of Solid Waste Collection Vehicles — Abstracted 600/9–75–001a** —BY S. Hong, Illinois, University of Urbana, IL **ORDER FROM: NTIS–PB** 239 897/AS $5.25 |
| 670/2–74–036a | 1DB314 | **Routing of Solid Waste Collection Vehicles, Final Report: Appendix A – Manual for Use of the Computer Codes — Abstracted 600/9–75–001a** —BY J. C. Liebman, Illinois, University of Urbana, IL **ORDER FROM: NTIS-PB** 239 898/AS $4.25 |
| 670/2–74–036b | 1DB314 | **Routing of Solid Waste Collection Vehicles: Appendix B – A Heuristic Solution to the M-Postmen's Problem — Abstracted 600/9–75–001a** —BY J. W. Male, Illinois, University of Urbana, IL **ORDER FROM: NTIS–PB** 239 899/AS $5.75 |
| 670/2–74–037 | 1DB064 | **Economic Analysis of the Processing and Disposal of Refuse Sludges** BY P. Kos, P. M. Keier, and J. M. Joyce, Curran Associates, Inc. Northampton, MA **ORDER FROM: NTIS–PB** 234 498/AS $4.00 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-74-038 | 1DB064 | **Wet Systems for Residential Refuse Collection: A Case Study for Springfield, Massachusetts** BY P. M. Meier, J. Kuhner, and R. E. Bolton, Curran Associates, Inc. Northampton, MA **ORDER FROM: NTIS-PB** 234 499/AS $5.75 |
| 670/2-74-039 | 1BB034 | **Relationship Between Diameter and Height for the Design of a Swirl Concentrator as a Combined Sewer Overflow Regulator** BY R. H. Sullivan, and M. M. Cohn, American Public Works Association Chicago, IL **ORDER FROM: GPO-**EP1.23/2:670/2-74-039 $1.00 **NTIS-PB** 234 646/AS |
| 670/2-74-040 | 1BB034 | **Urban Stormwater Management and Technology: An Assessment** BY J. A. Lager, and W. G. Smith, Metcalf and Eddy, Inc. Palo Alto, CA **ORDER FROM: NTIS-PB** 240 687/AS $11.50 |
| 670/2-74-041 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-74-042 | 1BB036 | **Waste Water Treatment and Reuse in a Metal Finishing Job Shop** S.K. Williams Company Wauwatosa, WI **ORDER FROM: NTIS-PB** 234 476/AS $3.75 |
| 670/2-74-043 | 1BB038 | **Development and Evaluation Report: Physical Chemical Marine Sanitation System** BY J. M. Heeney, R. B. Neveril, E. K. Kurg, and G. A. Remus, General American Transportation Corporation Niles, IL **ORDER FROM: NTIS-PB** 231 846/AS $7.00 |
| 670/2-74-044 | 1BB036 | **Ion Exchange Process for Recovery of Chromate from Pigment Manufacturing** BY D. Robinson, H. Weisberg, G. Chase, K. Libby Jr., and J. Capper, Mineral Pigments, Corporation Beltsville, MD **ORDER FROM: NTIS-PB** 233 641/AS $4.50 |
| 670/2-74-045 | 1BB034 | **Manual for Deicer Chemical Application Practices** BY D. L. Richardson, Arthur D. Little, Inc. Cambridge, MA **ORDER FROM:** Pending |
| 670/2-74-046 | 1BB043 | **On-Line Colorimetric Analyzers for Monitoring Nitrate-Nitrite, Ammonia, Orthophosphorus and Total Hydrolyzable Phosphorus in Wastewater-Treatment Process Streams** BY R. H. Wise, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 231 990/AS $4.50 |
| 670/2-74-047 | 1BB043 | **Activated Silica in Wastewater Coagulation** BY W. J. Weber Jr., and L. A. Ketchum, Michigan, University of, Environmental and Water Resources Engineering Ann Arbor, MI **ORDER FROM: NTIS-PB** 232 454/AS $6.25 |
| 670/2-74-048 | 1BB043 | **Oxygenation of Aqueous Bodies Using Liquid Oxygen-Loxination** BY T. D. Bass, W. Garner, and A. E. Vandergrift, Midwest Research Institute Kansas City, MO **ORDER FROM: NTIS-PB** 232 455/AS $3.75 |
| 670/2-74-049 | 1BB034 | **Microstraining and Disinfection of Combined Sewer Overflows – Phase III** BY M. Maher, Philadelphia Water Department Philadelphia, PA **ORDER FROM: GPO-**EP1.23/2:670/2-74-049 $1.95 **NTIS-PB** 235 771/AS |
| 670/2-74-050 | 1BB034 | **Combined Sewer Overflow Treatment by the Rotating Biological Contactor Process** BY F. L. Welsh, and D. J. Stucky, Autotrol Corporation Milwaukee, WI **ORDER FROM: NTIS-PB** 231 892/AS $5.75 |
| 670/2-74-051 | 1BB040 | **Limestone and Limestone-Lime Neutralization of Acid Mine Drainage** BY R. C. Wilmoth, Industrial Waste Treatment Research Laboratory, EPA Rivesville, WV **ORDER FROM: GPO-**EP1.23/2:670/2-74-051 $1.40 **NTIS-PB** 234 607/AS |
| 670/2-74-052 | 1BB041 | **Waste Oil Recycling and Disposal** BY M. J. Weinstein, Recon Systems, Inc. Princeton, NJ **ORDER FROM: GPO-**EP1.23/2:670/2-74-052 $4.00 **NTIS-PB** 235 857/AS $6.50 |
| 670/2-74-053 | 1BB038 | **Combustion Toilet for Use on Small Boats** BY T. S. McMahon, Ocean Systems, Inc. Reston, VA **ORDER FROM:** Pending |
| 670/2-74-054 | 1BB038 | **Sources of Oil and Water in Bilges of Great Lakes Ships** BY J. B. Woodward, Michigan, University of, Department of Naval Architecture and Marine Engineering Ann Arbor, MI **ORDER FROM: NTIS-PB** 233 846/AS $3.25 |
| 670/2-74-055 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-74-056 | 1BB038 | **Development of On-Shore Treatent System for Sewage from Watercraft Retention System** BY J. H. Robbins, and A. C. Green, FMC Corporation, Advanced Products Division San Jose, CA **ORDER FROM: GPO-**EP1.23/2:670/2-74-056 Price Pending **NTIS-PB** 234 645/AS |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-74-057 | 1BB036 | **Characterization of Waste Waters from the Ethical Pharmaceutical Industry** BY J. Mayes, Gulf Southern Research Institute for Pharmaceutical Associates Washington, DC **ORDER FROM:** Pending |
| 670/2-74-058 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-74-059 | 1BB036 | **Laboratory Study of Continous Electro-oxidation of Dilute Cuanide Waste** BY J. J. Byerley, and K. Enns, Waterloo, University of, Department of Chemical Engineering Waterloo, Ontario, Canada **ORDER FROM: NTIS-PB** 235 588/AS $3.25 |
| 670/2-74-060 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-74-061 | 1BB043 | **Phosphate Removal in an Activated Sludge Facility** BY R. E. Finger, G. J. Mason, D. A. Carlson, and G. L. Minton, Seattle, Municipality of Metropolitan Seattle, WA **ORDER FROM: NTIS-PB** 235 749/AS $4.50 |
| 670/2-74-062 | 1BB043 | **Cost-Effective Design Based Upon Field Derived Parameters** St. Louis Sewer District, Metropolitan St. Louis, MO **ORDER FROM: NTIS-PB** 234 356/AS $4.50 |
| 670/2-74-063 | 1BB038 | **Effects of Exhaust from Two-Cycled Outboard Engines** BY W. W. Shuster, N. L. Clesceri, S. Kobayashi, and W. Perrotte, Rensselaer Polytechnic Institute Troy, NY **ORDER FROM: NTIS-PB** 233 567/AS $7.25 |
| 670/2-74-064 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-74-065 | 1DB064 | **Preliminary Assessment of Wet Systems for Residential Refuse Collection** BY P. M. Meier, J. Kuhner, and C. J. Martel, Curran Associates, Inc. Northampton, MA **ORDER FROM: NTIS-PB** 234 496/AS $5.50 |
| 670/2-74-066 | 1DB064 | **Modifications to the Executive Computer Program for Steady-State Simulation of Wastewater Treatment Facilities** BY P. M. Meier, and G. R. Fisette, Curran Associates, Inc. Northampton, MA **ORDER FROM: NTIS-PB** 234 497/AS $3.75 |
| 670/2-74-067 | 1CB047 | **Mathematical Analysis of the Kinetics of Viral Inactivation** BY R. M. Clark, B. L. Grupenhoff, and G. C. Kent, Water Supply Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 235 124 $3.25 |
| 670/2-74-068 | 1DB064 | **Assessment of Wet Systems for Residential Refuse Collection: A Summary Report** BY P. M. Meier, J. Kuhner, and R. E. Bolton, Curran Associates, Inc. Northampton, MA **ORDER FROM: NTIS-PB** 236 085 $4.50 |
| 670/2-74-069 | 1BB043 | **Control Schemes for the Activated-Sludge Process** BY R. Smith, and R. G. Eilers, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 236 086 $3.75 |
| 670/2-74-070 | 1BB040 | **Mine Spoil Potentials for Soil and Water Quality** BY R. M. Smith, W. E. Grube Jr, T. Arkle Jr, and A. Sobek, West Virginia University Morgantown, WV **ORDER FROM: NTIS-PB** 237 525/AS $6.25 |
| 670/2-74-071 | 1BB033 | **Demonstration of Waste Flow Reduction from Households** BY S. Cohen, and H. Wallman, General Dynamics Corporation Groton, CT **ORDER FROM: NTIS-PB** 236 904/AS $5.25 |
| 670/2-74-072 | 1BB038 | **Assessing Effects on Water Quality by Boating Activity** BY Y. A. Yousef, Florida Technological University Orlando, FL **ORDER FROM: NTIS-PB** 237 519/AS $3.30 |
| 670/2-74-073 | 1BB041 | **Evaluation of MTF for Testing Hazardous Material Spill Control Equipment** BY C. R. Thomas, G. M. L. Robinson, and E. J. Martin, Hancock Company Bay St. Louis, MS **ORDER FROM: NTIS-PB** 240 762/AS $9.25 |
| 670/2-74-074 | 1BB043 | **Microbiology of Sewage Sludge Disposal in Soil** BY R. H. Miller, Ohio Agricultural Research and Development Center Wooster, OH **ORDER FROM: NTIS-PB** 237 817/AS $5.75 |
| 670/2-74-075 | 1BB034 | **Surge Facility for Wet and Dry Weather Flow Control** BY H. L. Welborn, Rohnert Park, City of Rohnert Park, CA **ORDER FROM: GPO-**EP1.23/2:670/2-74-075 $1.55 **NTIS-PB** 238 905/AS |
| 670/2-74-076a | 1DB064 | **Experimental High Ash Papermill Sludge Landfill – First Annual Report — Abstracted 600/9-75-001a** —BY O. B. Andersland, R. P. Vallee, and T. A. Armstrong, Michigan State University East Lansing, MI **ORDER FROM: NTIS-PB** 239 669/AS $7.00 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2–74–076b | 1DB064 | **Experimental High Ash Papermill Sludge Landfill – Second Annual Report — Abstracted 600/9–75–001a —** BY O. B. Andersland, R. P. Vallee, W. A. Charlie, and D. W. Marshall, Michigan State University East Lansing, MI **ORDER FROM: NTIS–PB** 239 618 $7.50 |
| 670/2–74–077 | 1BB043 | **Reverse Osmosis of Treated and Untreated Secondary Sewage Effluent** BY D. F. Boen, and G. L. Johannson, Eastern Municipal Water District Hemet, CA **ORDER FROM: NTIS–PB** 239 353/AS $7.50 |
| 670/2–74–078 | 1DB063 | **Industrial Chemicals Solid Waste Generation — The Significance of Process Resource Recovery, and Improved Disposal** BY J. C. Saxton, and M. Kramer, International Research and Technology Corporation Arlington, VA **ORDER FROM: GPO–**EP1.23/2:670/2–74–078 $2.15 **NTIS–PB** 233 464 $6.25 |
| 670/2–74–079 | 1BB034 | **Evaluation of Three Combined Sewage Overflow Treatment Alternatives — Abstracted 600/9–75–001a —** BY J. W. Parks, Shelbyville, City of Shelbyville, IL **ORDER FROM: NTIS–PB** 239 115/AS $5.25 |
| 670/2–74–080 | 1BB043 | **Study of an Integrated Power, Water and Wastewater Utility Complex** New York State Atomic and Space Development Authority New York, NY **ORDER FROM: NTIS–PB** 239 408/AS $7.50 |
| 670/2–74–081 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2–74–082 | 1DB063 | **Measures of Effectiveness for Refuse Storage, Collection, and Transportation Practices** Messer Associates, Inc. Silver Spring, MD **ORDER FROM: NTIS–PB** 241 252/AS $7.00 |
| 670/2–74–083 | 1DB063 | **Analysis of the Current Impact of Plastic Refuse Disposal Upon the Environment — Abstracted 600/9–75–001a** —BY D. A. Braughan, M. Y. Anastas, and H. H. Krause, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS–PB** 238 654/AS $4.25 |
| 670/2–74–084 | 1DB063 | **Study of Corrosion in Municipal Incinerators Versus Refuse Composition — Abstracted 600/9–75–001a —** BY D. A. Braughan, H. H. Krause, and W. W. Boyd, Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Pending |
| 670/2–74–085 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2–74–086 | 1BB034 | **Chemical Impact of Snow Dumping Practices** BY P. J. O'Brien, P. L. Levins, and C. H. Summers, Arthur D. Little, Inc. Cambridge, MA **ORDER FROM: NTIS–PB** 238 764/AS $3.75 |
| 670/2–74–087 | 1BB034 | **Assessment and Development Plan for Monitoring of Organics in Storm Flows — Abstracted 600/9–75–001a** —BY A. E. Molvar, and A. Tulumello, Raytheon Company Protsmouth, RI **ORDER FROM: NTIS–PB** 238 810/AS $4.75 |
| 670/2–74–088 | 1DB311 | **Promising Technologies for Treating Hazardous Waste** BY C. J. Rogers, and R. E. Landreth, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: NTIS–PB** 238 145 $3.75 |
| 670/2–74–089 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2–74–090 | 1BB034 | **Countermeasures for Pollution From Overflow – The State of the Art — Abstracted 600/9–75–001a** —BY R. Field, and J. A. Lager, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM:** Pending |
| 670/2–74–091 | 1BB038 | **Devices for On – Board Treatment of Waste from Vessels — Abstracted 600/9–75–001a** —BY T. J. O'Grady, and T. D. Lakomski, Thiokol Corporation Brigham City, UT **ORDER FROM: NTIS–PB** 240 993/AS $5.75 |
| 670/2–74–092 | 1BB038 | **Crankcase Drainage from In-Service Out-board Motors — Abstracted 600/9–75–001a** —BY C. P. Hare, and C. J. Pringer, Southwest Research Institute San Antonio, TX **ORDER FROM: NTIS–PB** 240 691/AS $5.75 |
| 670/2–74–093 | 1BB040 | **Environmental Protection in Surface Mining of Coal** BY E. C. Grim, and R. D. Hill, Industrial Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: GPO–**EP1.23/2:670/2–74–093 $3.50 |
| 670/2–74–094 | 1CB047 | **Microbiological Production of Geosmin** BY N. N. Gerber, Rutgers University New Brunswick, NJ **ORDER FROM: GPO–**EP1.23/2:670/2–74–094 $0.65 **NTIS–PB** 238 781/AS |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-74-095a | 1DB314 | **Effects of Water Pollution Controls on Solid Waste Generation, 1971 to 1985: Executive Summary — Abstracted 600/9-75-001a** —BY R. Stone, Ralph Stone and Company, Inc. Los Angeles, CA **ORDER FROM: NTIS-PB** 240 739/AS $4.75 |
| 670/2-74-095b | 1DB314 | **Forecast of the Effects of Air and Water Controls of Solid Waste Generation — Abstracted 600/9-75-001a** —BY R. Stone, and D. Brows, Ralph Stone and Company, Inc. Los Angeles, CA **ORDER FROM: NTIS-PB** 238 819/AS $19.25 |
| 670/2-74-096 | 1BB034 | **Characterization and Treatment of Urban Land Runoff — Abstracted 600/9-75-001a** —BY N. V. Colston, North Carolina, University of Raleigh, NC **ORDER FROM: NTIS-PB** 240 987/AS $6.25 |
| 670/2-74-097 | 1BB038 | **Characterization of Vessel Waste in Duluth-Superior Harbor — Abstracted 600/9-75-001a** —BY G. D. Gumtz, D. M. Jordan, and R. Waller, Environmental Quality Systems, Inc. Rockville, MD **ORDER FROM: NTIS-PB** 241 081/AS $4.25 |
| 670/2-75-001 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/2-75-002 | 1BB034 | **Suspended Solids Monitor — Abstracted 600/9-75-001a** —BY J. W. Liskowitz, G. J. Francey, and J. Tarzynski, American Standards, Inc. New Brunswick, NJ **ORDER FROM: NTIS-PB** 241 581/AS $3.75 |
| 670/2-75-003 | 1BB041 | **Oil Spill and Oil Pollution Reports — Abstracted 600/9-75-001a** —BY Jr., F. A DeWitt, and P. Melvin, California, University of Santa Barbara, CA **ORDER FROM: GPO**-EP1.23/2:670/2-75-003 Price Pending **NTIS-PB** 240 719/AS $7.25 |
| 670/2-75-004 | 1BB041 | **Feasibility of 5 gpm Dynactor/Flash Magnetic Separator System to Treat Spilled Hazardous Materials — Abstracted 600/9-75-001a** —BY R. G. Sanders, S. R. Rich, and T. G. Pantazelos, Industrial Bio-Test Laboratories, Inc. Northbrook, IL **ORDER FROM: NTIS-PB** 241 080/AS $3.75 |
| 670/2-75-005 | 1DB311 | **Degradation Mechanism: Controlling the Bioaccumulation of Hazardous Materials — Abstracted 600/9-75-001a** —BY C. Rogers, and R. Landreth, Solid and Hazardous Waste Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 240 748/AS $3.25 |
| 670/2-75-006 | 1BB040 | **Removal of Manganese From Mine Drainage by Ozone and Chlorine** BY R. Rozelle, and H. Swain, Wilkes College Wilkes Barre, PA **ORDER FROM: NTIS-PB** 241 143/AS $4.25 |
| 670/2-75-007 | 1BB038 | **On-Shore Treatment Systems for Sewerage from Watercraft Retention Systems — Abstracted 600/9-75-001a** —BY A. J. Glueckert, and P. A. Saigh, General American Transportation Corporation Niles, IL **ORDER FROM: NTIS-PB** 239 630 $3.75 |
| 670/2-75-008 | 1BB043 | **System Alternatives in Oxygen Activated Sludge — Abstracted 600/9-75-001a** —BY D. F. Bishop, S. M. Bennet, and A. B. Hais, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 241 310/AS $4.25 |
| 670/2-75-009 | 1BB033 | **Water Renovation of Municipal Effluents by Reverse Osmosis — Abstracted 600/9-75-001a** —BY J. E. Cruver, J. E. Beckman, and E. Bevege, Gulf Environmental Systems Company San Diego, CA **ORDER FROM: NTIS-PB** 240 018/AS $5.75 |
| 670/2-75-010 | 1BB034 | **Multi-Purpose Combined Sewer Overflow Treatment Facility, Mount Clemens, Michigan** BY V. U. Mahida, and F. J. DeDecker, Mount Clemens, City of Mount Clemens, MI **ORDER FROM:** Pending |
| 670/2-75-011 | 1BB034 | **Physical and Settling Characteristics of Particulates in Storm and Sanitary Wastewaters** BY R. J. Dalrymple, S. L. Hodd, and D. C. Morin, American Public Works Association Chicago, IL **ORDER FROM: NTIS-PB** 242 001/AS $3.75 |
| 670/2-75-012 | 1BB043 | **Lime Stabilized Sludge: Its Stability and Effect on Agricultural Land — Abstracted 600/9-75-001a** —BY C. A. Counts, and A. J. Shuckrow, Battelle Memorial Institute Richland, WA **ORDER FROM: NTIS-PB** 241 809/AS $4.75 |
| 670/2-75-013 | 1BB043 | **Interim Report of Task Force on Phosphate Removal Sludges — Abstracted 600/9-75-001a** —BY J. B. Farrell, Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 238 317/AS $7.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | |
|---|---|
| 670/2-75-014 | 1DB063 **Feasibility Study of Use of Molten Salt Technology for Pyrolysis of Solid Waste** BY V. L. Hammond, and L. K. Mudge, Battelle Pacific Northwest Laboratories Richland, WA **ORDER FROM: NTIS-PB** 238 674/AS $4.75 |
| 670/2-75-015 | 1BB036 **Pilot Plant Optimization of Phosphoric Acid Recovery Process** BY L. E. Lancy, F. A. Steward, and J. N. West, Lancy Laboratories Zelienople, PA **ORDER FROM: NTIS-PB** 241 793/AS $3.75 |
| 670/2-75-016 | 1BB036 **Reclamation of Sulfuric Acid From Waste Streams** BY H. C. Peterson, and P. L. Kern, New Jersey Zinc Company Palmerton, PA **ORDER FROM: NTIS-PB** 241 791/AS $4.25 |
| 670/2-75-017 | 1BB034 **Storm Water Management Model: User's Manual – Version II — Abstracted 600/9-75-001a** —BY W. C. Huber, J. P. Heaney, M. A. Medina, W. A. Peltz, H. Sheikh, and G. F. Smith, Florida, University of Gainesville, FL **ORDER FROM:** NERC – Cincinnati, Ohio 45268 |
| 670/2-75-018 | 1BB036 **Reclamation of Metal Values from Metal-Finishing Waste Treatment Sludges** BY A. B. Tripler Jr., R. H. Cherry Jr., and Jr., G. R Smithson, Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 242 018/AS $4.75 |
| 670/2-75-019 | 1BB034 **Biological Treatment of Combined Sewer Overflow at Kenosha, Wisconsin** BY R. W. Agnew, C. A. Hanson, W. H. Richardson, M. J. Clark, and O. F. Nelson, Kenosha, City of Kenosha, WI **ORDER FROM: NTIS-PB** 242 126/AS $8.50 |
| 670/2-75-020 | 1BB034 **Sewerage System Monitoring and Remote Control** BY T. R. Watt, R. G. Skrentner, and A. C. Davanzo, Detroit Metro Water Department Detroit, MI **ORDER FROM: NTIS-PB** 242 107/AS $7.00 |
| 670/2-75-021 | 1BB034 **Bench-Scale High-Rate Disinfection of Combined Sewer Overflows With Chlorine and Chlorine Dioxide** BY P. E. Moffa, Jr., E. C Tifft, S. L. Richardson, and J. E. Smith, Syracuse University Syracuse, NY **ORDER FROM:** PB No. Pending |
| 670/2-75-022 | 1BB034 **Urban Stormwater Management Modeling and Decision-Making** BY J. P. Heaney, W. C. Huber, H. Sheikh, M. A. Medina, J. R. Doyle, W. A. Peltz, and J. E. Darling, Florida, University of Gainesville, FL **ORDER FROM:** PB No. Pending |
| 670/2-75-023 | 1DB064 **Evaluation of Health Hazards Associated With Solid Waste Sewage Sludge Mixtures** BY W. L. Gaby, East Tennessee State University Johnson City, TN **ORDER FROM: NTIS-PB** 241 810/AS $4.25 |
| 670/2-75-024 | 1DB064 **Industrial Solid Waste Classification Systems — Abstracted 600/9-75-001a** —BY J. B. Berkowitz, F. March, and R. Horne, Arthur D. Little, Inc. Cambridge, MA **ORDER FROM: NTIS-PB** 239 119/AS $10.50 |
| 670/2-75-025 | 1DB063 **High-Temperature Vortex Incinerator — Abstracted 600/9-75-001a** —BY R. C. Thurnau, and D. A. Oberacker, Solid and Hazardous Waste Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 240 723/AS $3.75 |
| 670/2-75-026a | 1DB314 **Analysis Models for Solid Waste Collection — Abstracted 600/9-75-001a** —BY J. F. Hudson, D. S. Grossman, and D. H. Marks, Massachusetts Institute of Technology Cambridge, MA **ORDER FROM: NTIS-PB** 239 117/AS $7.50 |
| 670/2-75-026b | 1DB314 **Analysis Models for Solid Waste Collection — Abstracted 600/9-75-001a** —BY J. F. Hudson, D. S. Grossman, and D. H. Marks, Massachusetts Institute of Technology Cambridge, MA **ORDER FROM: NTIS-PB** 239 494/AS $7.25 |
| 670/2-75-027 | 1BB043 **Reverse Osmosis of Treated and Untreated Secondary Sewage Effluent; Appendix A-2 and Appendix A-6 -— Abstracted 600/9-75-001a** —BY D. F. Boen, and G. L. Johannsen, Eastern Municipal Water District Hemet, CA **ORDER FROM: NTIS-PB** 239 354/AS $3.75 |
| 670/2-75-028 | 1BB043 **Electrochemical Carbon Regeneration** BY P. H. Owen, and J. P. Barry, Environics, Inc. Huntington Beach, CA **ORDER FROM: NTIS-PB** 239 156/AS $3.75 |
| 670/2-75-029 | 1BB036 **Copper Recovery from Brass Mill Discharge by Cementation with Scrap Iron — Abstracted 600/9-75-001a** —BY P. O. Case, Anaconda Company Waterbury, CT **ORDER FROM: NTIS-PB** 241 822/AS $4.25 |
| 670/2-75-030 | 1DB064 **Urban Street Cleaning — Abstracted 600/9-75-001a** —BY A. H. Levis, Polytechnic Institute of Brooklyn Brooklyn, NY **ORDER FROM: NTIS-PB** 239 327/AS $6.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-75-031 | 1DB314 | **Solid Waste Conversion: Cellulose Liquefaction — Abstracted 600/9-75-001a** —BY J. A. Kaufman, and A. H. Weiss, Worcester Polytechnic Institute Worcester, MA **ORDER FROM: NTIS-PB** 239 509/AS $7.25 |
| 670/2-75-032 | 1DB314 | **Fabrication of Single Cell Protein From Cellulosic Wastes — Abstracted 600/9-75-001a** —BY W. H. Daly, and Jr., L. P Ruiz, Louisiana State University Baton Rouge, LA **ORDER FROM: NTIS-PB** 239 502/AS $4.25 |
| 670/2-75-033a | 1DB064 | **Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. I – Summary** BY N. L. Hecht, and D. S. Duvall, Dayton Research Institute, University of Dayton, OH **ORDER FROM:** Pending |
| 670/2-75-033b | 1DB064 | **Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. II – Municipal Sludges** BY N. L. Hecht, and D. S. Duvall, Dayton Research Institute, University of Dayton, OH **ORDER FROM:** Pending |
| 670/2-75-033c | 1DB064 | **Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. III – Utility Coal Ash** BY N. L. Hecht, and D. S. Duvall, Dayton Research Institute, University of Dayton, OH **ORDER FROM:** Pending |
| 670/2-75-033d | 1DB064 | **Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. IV – Municipal Incinerator Residues** BY N. L. Hecht, and D. S. Duvall, Dayton Research Institute, University of Dayton, OH **ORDER FROM:** Pending |
| 670/2-75-034 | 1DB314 | **Specifications for Materials Recovered from Municipal Refuse** BY H. Alter, and W. R. Reeves, National Center for Resource Recovery, Inc. Washington, DC **ORDER FROM:** Pending |
| 670/2-75-035 | 1BB034 | **Stream Pollution Abatement by Supplement Pumping — Abstracted 600/9-75-001a** —BY C. W. Reh, and W. W. Sadler, Richmond, City of Richmond, VA **ORDER FROM: NTIS-PB** 239 566/AS $5.25 |
| 670/2-75-036 | 1CB047 | **Survey of Corrosion Products in the Seattle Water Department Tolt Distribution** BY R. A. Dangel, Water Supply Research Laboratory, EPA Cincinnati, OH **ORDER FROM:** Pending |
| 670/2-75-037 | 1BB043 | **Demonstration of a High-Rate Activated Sludge System** BY C. H. Huang, and D. L. Feuerstein, Engineering Science, Inc. Berkeley, CA BY E. L. Miller, City of Chino Chino, CA **ORDER FROM: NTIS-PB** 240 005/AS $6.25 |
| 670/2-75-038 | 1BB043 | **Demonstrated Technology and Research Needs for Reuse of Municipal Wastewater** BY C. J. Schmidt, and E. V. Clements III, SCS Engineers Long Beach, CA **ORDER FROM:** Pending |
| 670/2-75-039 | 1BB043 | **Advanced Automatic Control Strategies for the Activated Sludge Treatment Process** BY J. F. Petersack, and R. G. Smith, Systems Control, Inc. Palo Alto, CA **ORDER FROM:** Pending |
| 670/2-75-040 | 1DB314 | **Design and Performance Considerations for a Pilot Process for Separating Mixed Municipal Refuse** BY D. G. Wilson, and S. D. Senturia, Massachusetts Institute of Technology Cambridge, MA **ORDER FROM:** Pending |
| 670/2-75-041 | 1BB034 | **Storm Water Management Model: Dissemination and User Assistance** BY J. A. Hagarman, and F. R. Dressler, University City Science Center Philadelphia, PA **ORDER FROM:** Pending |
| 670/2-75-042 | 1BB041 | **Methods to Treat, Control and Monitor Spilled Hazardous Materials** BY R. J. Pilie, R. E. Baier, R. C. Ziegler, R. P. Leonard, J. G. Michalovic, S. L. Pek, and D. H. Bock, Calspan Corporation Buffalo, NY **ORDER FROM:** Pending |
| 670/2-75-043 | 1BB036 | **Disposal and Utilization of Waste Kiln Dust From Cement Industry** BY T. A. Davis, and D. B. Hooks, Southern Research Institute Birmingham, AL **ORDER FROM:** Pending |
| 670/2-75-044 | 1BB041 | **Oil Spill and Oil Pollution Reports – November 1974 – February 1975** BY F. A. DeWitt Jr., and P. Melvin, California, University of Santa Barbara, CA **ORDER FROM:** Pending |
| 670/2-75-045 | 1BB043 | **Replacement of Activated Sludge Secondary Clarifiers by Dynamic Straining** BY M. Joyce, W. Schultz, and A. Strom, FMC Corporation Itasca, IL **ORDER FROM:** Pending |
| 670/2-75-046 | 1BB034 | **Rainfall-Runoff Relations on Urban and Rural Areas** BY E. F. Brater, and J. D. Sherrill, Michigan, University of Ann Arbor, MI **ORDER FROM:** Pending |
| 670/2-75-047 | 1BB040 | **Up-Dip Versus Down-Dip Mining: An Evaluation** BY J. W. Mentz, and J. B. Warg, Skelly & Loy, Engineers Harrisburg, PA **ORDER FROM:** Pending |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-75-048 | 1BB040 | **Water Quality Control in Mine Spoils — Upper Colorado River Basin** BY D. B. McWhorter, R. K. Skogerboe, and G. V. Skogerboe, Colorado State University Fort Collins, CO **ORDER FROM:** Pending |
| 670/2-75-049 | 1BB043 | **Review of Landspreading of Liquid Municipal Sewage Sludge** BY T. E. Carroll, D. L. Maase, J. M. Genco, and C. N. Ifeadi, Battelle Memorial Institute Columbus, OH **ORDER FROM:** Pending |
| 670/2-75-050a | 1CB047 | **Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Summary Report** Black & Veatch Consulting Engineers Kansas City, MO **ORDER FROM:** Pending |
| 670/2-75-050b | 1CB047 | **Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix A. Weather and Lake Level Data, Water Quality Data, and Raw Water Pumping Schedule** Black & Veatch Consuliing Engineers Kansas City, MO **ORDER FROM:** Pending |
| 670/2-75-050c | 1CB047 | **Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix B. Design, Installation and Operation of Pilot Filters. Appendix C. Summary of Data for Individual Filter Runs** Black & Veatch Consulting Engineers Kansas City, MO **ORDER FROM:** Pending |
| 670/2-75-050d | 1CB047 | **Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix D. Head Loss and Turbidity Curves for Individual Filter Runs** Black & Veatch Consulting Engineers Kansas City, MO **ORDER FROM:** Pending |
| 670/2-75-050e | 1CB047 | **Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix E. Ontario Research Foundation Electron Microscope Analysis Results. Appendix F. EPA National Water Quality Laboratory X-Ray Diffraction Analysis Results. Appendix G. University of Minnesota at Duluth Electron Microscope Analysis Results** Black & Veatch Consulting Engineers Kansas City, MO **ORDER FROM:** Pending |
| 670/2-75-050f | 1CB047 | **Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix H. Comparison of Turbidimeters** Black & Veatch Consulting Engineers Kansas City, MO **ORDER FROM:** Pending |
| 670/2-75-050g | 1CB047 | **Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix I. Diatomite Filters for Asbestiform Fiber Removal from Water** Black & Veatch Consulting Engineers Kansas City, MO **ORDER FROM:** Pending |
| 670/2-75-051 | 1BB043 | **Single-Stage Nitrification-Denitrification** BY D. F. Bishop, J. A. Heidman, and J. B. Stamberg, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM:** Pending |
| 670/2-75-052 | 1BB043 | **Carbon, Nitrogen, and Phosphorus Removal in Staged NitrificationDenitrification Treatment** BY J. A. Heidman, D. F. Bishop, and J. B. Stamberg, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM:** Pending |
| 670/2-75-053 | 1DB064 | **Use of Domestic Waste Glass for Urban Paving – Summary Report** BY W. R. Malisch, D. E. Day, and B. G. Wixon, Missouri, University of Rolla, MO **ORDER FROM:** Pending |
| 670/2-75-054 | 1BB034 | **Characterization and Treatment of Combined Sewer Overflows** San Francisco, City of San Francisco, CA **ORDER FROM: NTIS-PB** 241 299/AS $7.25 |
| 670/2-75-055 | 1BB036 | **Removal of Chromium from Plating Rinse Water Using Activated Carbon** BY R. B. Landrigan, and J. B. Hallowell, Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Pending |
| 670/2-75-056 | 1BB041 | **Preliminary Design of a Comprehensive Waste Oil Processing Facility** BY G. D. Gumtz, and E. J. Martin, Environmental Quality Systems, Inc. Rockville, MD **ORDER FROM:** Pending |
| 670/2-75-057 | 1BB041 | **Guidelines for the Disposal of Small Quantities of Unused Pesticide** BY E. W. Lawless, T. L. Ferguson, and A. F. Meiners, Midwest Research Institute Kansas City, MO **ORDER FROM:** Pending |
| 670/2-75-058 | 1DB314 | **Environmental Assessment of Future Disposal Methods for Plastics in Municipal Solid Waste** BY D. A. Vaughan, C. Ifeadi, R. A. Markle, and H. H. Krause, Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Pending |
| 670/2-75-059 | 1BB041 | **Oil Spill and Oil Pollution Reports, February 1975 – April 1975** BY F. A. DeWitt Jr., and P. Melvin, California, University of Santa Barbara, CA **ORDER FROM:** Pending |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/2-75-060 | 1BB043 | **Controlling Sulfides in Sanitary Sewers Using Air and Oxygen** BY R. J. Sewell, Port Arthur, City of Port Arthur, TX **ORDER FROM:** Pending |
| 670/2-75-061 | 1BB038 | **Analysis of Emissions from Outboard Two Cycle Marine Engines** BY W. J. Weber Jr., D. E. Cole, and J. C. Posner, Michigan, University of Ann Arbor, MI **ORDER FROM:** PB No. Pending |
| 670/2-75-062 | 1BB038 | **Analysis of Pollution from Marine Engines and Effects on the Environment** Environmental Control Technology Corporation Ann Arbor, MI **ORDER FROM:** PB No. Pending |
| 670/2-75-063 | 1BB038 | **Analysis of Pollution from Marine Engines and Effects on the Environment – Southern Lakes** BY H. L. Davis, and K. D. Wilson, Environmental Science and Engineering, Inc. Gainesville, FL **ORDER FROM:** PB No. Pending |
| 670/2-75-064 | 1BE038 | **Analysis of Pollution from Marine Engines and Effects on the Environment – Summary Report** Boating Industry Association Chicago, IL **ORDER FROM:** PB No. Pending |
| 670/4-73-001 | 1BA027 | **Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents** BY C. I. Weber, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 227 183 $12.50 |
| 670/4-73-002 | 1BA027 | **Investigation of Remote Sensing Techniques for Agricultural Feedlot Pollution Detection** BY F. A. Schmer, D. W. Ryland, and F. A. Waltz, South Dakota State University Brookinger, SD **ORDER FROM:** Pending |
| 670/4-73-003 | | **670/4-73-003 thru 670/4-73-017 are Unassigned and will remain Unassigned ORDER FROM:** (Unassigned) |
| 670/4-73-018 | 1HA327 | **Performance of the Union Carbide Dissolved Oxygen Sensor** BY R. J. O'Herron, National Environmental Research Center, Analytical Quality Control Laboratory Cincinnati, OH **ORDER FROM: NTIS-PB** 239 162/AS $3.25 |
| 670/4-73-019 | | **670/4-73-019 thru 670/4-73-025 are Unassigned and will remain Unassigned ORDER FROM:** (Unassigned) |
| 670/4-73-026 | | **(No. Cancelled) ORDER FROM:** (No. Cancelled) |
| 670/4-74-001 | 1HA327 | **Literature Survey of Instrumental Measurements of Biochemical Oxygen Demand for Control Application, 1960–1963** BY R. J. O'Herron, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 232 765/AS $3.25 |
| 670/4-74-002 | 1BA027 | **Simultaneous and Automated Determination of Total Phosphorous and Total Kjeldahl** BY M. E. Gales, and R. L. Booth, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 232 710/AS $3.25 |
| 670/4-74-003a | 1BA027 | **Analytical Methodology Information Center: Activities for 1973 – 1974** BY R. L. Little, and R. L. Dearby, Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Garrett, L. 202–426–2355 |
| 670/4-74-003b | 1BA027 | **Reviews of Current Literature on Analytical Methodology and Quality Control – Activities for 1973 through 1974** Battelle Columbus Laboratories Columbus, OH **ORDER FROM:** Garrett, L. 202–426–2355 |
| 670/4-74-004 | 1BA027 | **Estimation of Polychlorinated Biphenyls in the Presence of Dot-Type Compounds** Baird-Atomic, Inc. Bedford, MA **ORDER FROM: NTIS-PB** 233 599/AS $4.75 |
| 670/4-74-005 | 1BA027 | **Environmental Requirements and Pollution Tolerance of Freshwater Diatoms** BY R. L. Lowe, Bowling Green State University Bowling Green, OH **ORDER FROM: NTIS-PB** 239 490/AS $9.50 |
| 670/4-74-006 | 1BA027 | **Taxonomy and Ecology of Stenonema Mayflies (Heptageniidae: Ephemeroptera) — Abstracted 600/9-75-001a** —BY P. A. Lewis, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 241 235/AS $4.75 |
| 670/4-74-007 | 1HA327 | **Evaluation of the Ryan's Waterproof Thermograph (Model F-30)** BY R. P. Lauch, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 237 561/AS $3.25 |
| 670/4-74-008 | 1BA027 | **Occurrence of Organohalides in Chlorinated Drinking Waters** BY T. A. Bellar, J. J. Lichtenberg, and R. C. Kroner, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: GPO-**EP1.23/5:670/4-74-008 $0.65 |

# BIBLIOGRAPHIC SECTION

| **REPORT NO.** | | |
|---|---|---|
| 670/4-74-009 | 1BA027 | **Determination of Volatile Organic Compounds at the UG/1 Level in Water by Gas Chromatography** BY T. A. Bellar, and J. J. Lichtenberg, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: GPO-**EP1.23/5:670/4-74-009 $0.80 **NTIS-PB** 237 973/AS |
| 670/4-75-001 | 1HA327 | **Performance of the OSCO Model 1391 Water Wastewater Sampler — Abstracted 600/9-75-001a** —BY R. P. Lauch, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 240 700/AS $3.75 |
| 670/4-75-002 | 1HA327 | **Interfacing a 24-Point Analog Recorder to a Computer Controlled Telemetry Line — Abstracted 600/9-75-001a** —BY J. M. Teuschler, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 241 086/AS $3.75 |
| 670/4-75-003 | 1HA327 | **Application and Procurement of Automatic Wastewater Samplers — Abstracted 600/9-75-001a** —BY R. P. Lauch, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 241 085/AS $3.75 |
| 670/4-75-004a | 1HA327 | **Fortran Programs for Analyzing Collaborative Test Date: Part I – General Statistics — Abstracted 600/9-75-001a** —BY E. C. Julian, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 241 707/AS $3.75 |
| 670/4-75-004b | 1HA327 | **Fortran Programs for Analyzing Collaborative Test Date: Part II – Scatter Plots — Abstracted 600/9-75-001a** —BY E. C. Julian, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 241 708/AS $3.75 |
| 670/4-75-005 | 1HA327 | **Investigation of the Orion Research Cyanide Monitor** BY R. J. O'Herron, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 241 802/AS $3.75 |
| 670/4-75-006 | 1HA327 | **Activities and Needs Related to Radioactive Standards for Environmental Measurements: A Symposium held in Washington, DC, August 21, 1973** BY J. E. Eldridge, and B. Kahn, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM:** Pending |
| 670/5-73-001 | | **670/5-73-001 thru 670/5-73-011 are Unassigned and will remain Unassigned ORDER FROM:** (Unassigned) |
| 670/5-73-012 | 1DA312 | **Systems Simulation and Solid Waste Planning: A Case Study** BY R. M. Clark, and J. I. Gillean, National Environmental Research Center, Office of Program Coordination Cincinnati, OH **ORDER FROM: NTIS-PB** 222 995 $3.75 |
| 670/5-73-013 | | **670/5-73-013 thru 670/5-73-019 are Unassigned and will remain Unassigned ORDER FROM:** (Unassigned) |
| 670/5-73-020 | 1DA312 | **Study of the Economics of Hospital Solid Waste Systems** BY R. G. Bond, Minnesota, University of, Division of Environmental Health Minneapolis, MN **ORDER FROM: NTIS-PB** 221 681 $9.00 |
| 670/5-73-021 | 1DA312 | **Economic and Technological Impediments to Recycling Obsolete Ferrous Solid Waste** BY O. W. Albrecht, and R. G. McDermott, Solid and Hazardous Waste Research Laboratory, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 223 034 $4.25 |
| 670/5-74-001 | 1DA312 | **Hospital Solid Waste: An Annotated Bibliography** BY R. D. Siner, A. G. Duchene, and N. J. Vick, Minnesota, University of, School of Public Health Minneapolis, MN **ORDER FROM: NTIS-PB** 227 708/AS $5.75 |
| 670/5-74-002 | 1DA312 | **Case Study and Business Analysis of the Scrap Industry** Resource Planning Institute Cambridge, MA **ORDER FROM: NTIS-PB** 229 200/AS $4.75 |
| 670/5-74-003 | 1DA312 | **Can Federal Procurement Practices be Used to Reduce Solid Waste** BY J. Milgrom, Arthur D. Little, Inc. Cambridge, MA **ORDER FROM: NTIS-PB** 229 727/AS $7.50 |
| 670/5-74-004 | 1DA312 | **Secondary Fiber Recovery Incentive Analysis** BY F. A. Cardin, Resource Planning Institute Cambridge, MA **ORDER FROM: NTIS-PB** 241 082/AS $10.25 |
| 670/5-74-005 | 1DA312 | **Aluminum as a Component of Solid Waste and a Recoverable Resource** BY R. J. Talley, and R. H. Ongerth, National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 235 770/AS $3.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/5–74–006 | 1DA312 | **Criteria for Regional Solid Waste Management Planning — Abstracted 600/9–75–001a** —BY B. H. Stevens, Regional Science Research Institute Philadelphia, PA **ORDER FROM: NTIS-PB** 239 631 $9.50 |
| 670/5–74–007 | 1DA312 | **Optimal Configuration of a Regional Solid Waste Management System** BY A. A. Pathak, California, University of Berkeley, CA **ORDER FROM: NTIS-PB** 233 360/AS $5.75 |
| 670/5–74–008 | 1DA312 | **Optimization Models for Regional Public Systems** BY K. S. Vasan, California, University of Berkeley, CA **ORDER FROM: NTIS-PB** 231 309/AS $4.75 |
| 670/5–74–009 | 1DA312 | **Model for Optimal Design and Operation of Solid Waste Transfer Stations** BY H. J. Yaffe, California, University of Berkeley, CA **ORDER FROM: NTIS-PB** 227 075/AS $4.50 |
| 670/5–75–001 | 1DA312 | **Evaluation of Feasibility and Economic Implication of Pricing Mechanisms in Solid Waste Management — Abstracted 600/9–75–001a** —BY E. Ernst, ABT Associates Inc. Cambridge, MA **ORDER FROM: NTIS-PB** 239 116/AS $4.75 |
| 670/9–73–001 | | **670/9–73–001 thru 670/9–73–003 are Unassigned and Will Remain Unassigned ORDER FROM:** (Unassigned) |
| 670/9–73–004 | 1RA103 | **Environmental Research Publications** National Environmental Research Center, Technical Information Office Cincinnati, OH **ORDER FROM: NTIS-PB** 223 591/AS $3.00 |
| 670/9–73–005 | | **670/9–73–005 thru 670/9–73–034 are Unassigned and Will Remain Unassigned ORDER FROM:** (Unassigned) |
| 670/9–73–035 | 1DA312 | **Socio-Economic Factors Affecting Demand for Municipal Collection of Household Refuse** Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 225 020/7 $3.50 |
| 670/9–73–036 | | **670/9–73–036 thru 670/9–73–054 are Unassigned and will Remain Unassigned ORDER FROM:** (Unassigned) |
| 670/9–73–055 | 1RA103 | **Annual Report, 1972, NERC – Cincinnati** National Environmental Research Center, Technical Information Office Cincinnati, OH **ORDER FROM: NTIS-PB** 222 910 $3.75 |
| 670/9–73–056 | 1RA103 | **Active Research Tasks Report, Fiscal Year 1973** BY G. R. Schultz, and D. J. Harmon, National Environmental Research Center, Office of Research and Development Cincinnati, OH **ORDER FROM: NTIS-PB** 223 567/AS $6.50 |
| 670/9–74–001 | 1RA103 | **Environmental Research in 1973, Annual Report** National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 229 510/AS $5.25 |
| 670/9–74–002 | 1RA103 | **News of Environmental Research in Cincinnati – May-December, 1973** National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM: NTIS-PB** 230 935/AS $6.25 |
| 670/9–74–003 | 1BB033 | **Second U.S. – Japan Conference on Sewage Treatment Technology December 1–6, 1972** Office of Research and Development, Office of International Affairs Washington, DC **ORDER FROM: NTIS-PB** 230 709 $28.25 |
| 670/9–74–004 | 1RA103 | **Excerpts from Control of Infiltration and Inflow into Sewer Systems and Prevention and Correction of Excessive Infiltration and Inflow Into Sewer Systems** National Environmental Research Center, Technical Information Staff Cincinnati, OH **ORDER FROM:** Pending |
| 670/9–74–005 | 1BA027 | **Virus in Waste, Renovated, and Other Waters – 1973 Literature Abstracts** BY G. Berg, Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH **ORDER FROM:** Pending |
| 670/9–74–006 | 1RA103 | **Pollution Control Technology Assessment – Proceedings of an Environmental Resources Conference, May 1–3, 1974 --- Abstracted 600/9–75–001a** —Battelle Columbus Laboratories Columbus, OH **ORDER FROM: NTIS-PB** 238 303/AS $7.00 |
| 670/9–75–001 | 1RA103 | **Environmental Research Publications 1971–1975 — Abstracted 600/9–75–001a** —Technical Information Staff, NERC Cincinnati, OH **ORDER FROM: NTIS-PB** 239 602/AS $5.25 |
| 670/9–75–002 | 1RA103 | **NERC-Cincinnati Annual Report, 1974** Technical Information Staff, NERC Cincinnati, OH **ORDER FROM: NTIS-PB** 242 040/AS $5.25 |

# BIBLIOGRAPHIC SECTION

| REPORT NO. | | |
|---|---|---|
| 670/9–75–003 | 1RA103 | **News of Environmental Research in Cincinnati, January – December 1974 — Abstracted 600/9–75–001a —** Technical Information Staff, NERC Cincinnati, OH **ORDER FROM: NTIS-PB** 240 131 $4.25 |
| 670/9–75–004 | 1BB043 | **Upgrading Wastewater Stabilization Ponds to Meet New Discharge Standards — Abstracted 600/9–75–001a** —BY E. J. Middlebrooks, D. H. Falkenborg, R. F. Lewis, and D. J. Ehreth, Utah State University Logan, UT **ORDER FROM: NTIS-PB** 240 402/AS $7.50 |
| 670/9–75–005 | 1RA103 | **Third U.S. — Japan Conference on Sewage Treatment Technology, Proceedings, February 12 – 16, 1974** National Environmental Research Center, EPA Cincinnati, OH **ORDER FROM:** Pending |
| 670/9–75–006 | 1CB047 | **Handbook for Evaluating Water Bacteriology** BY E. E. Geldreich, Water Supply Research Laboratory, NERC, EPA Cincinnati, OH **ORDER FROM:** Pending |
| 680/1–75–001 | 1FA082 | **Synergistic Effect of Polonium-210 and Cigarette Smoke in Rats** BY S. C. Black, and E. W. Bretthauer, National Environmental Research Center, EPA Las Vegas, NV **ORDER FROM:** Pending |
| 680/4–73–001b | 1HA327 | **Environmental Radioactivity Laboratory Intercomparison Studies Program, 1973 – 1974** Quality Assurance Research Laboratory, EPA Las Vegas, NV **ORDER FROM: GPO-**EP1.23/5:680/4–73–001b $0.65 **NTIS-PB** 240 962/AS $3.75 |
| 680/4–73–001A | 1HA327 | **Radioactivity Standards Distribution Program, 1973 – 1974** National Environmental Research Center, Quality Assurance Branch, EPA, Las Vegas, NV **ORDER FROM: GPO-**EP1.23/5:680/4–73–001A $0.60 **NTIS-PB** 240 955/AS $3.25 |
| 680/4–73–002 | 1HA326 | **Simplified Atomic Absorption Determination of Stable Strontium in Milk and Hay** BY J. Barth, National Environmental Research Center, EPA Las Vegas, NV BY B. H. Bruckner, U.S. Department of Health, Education, and Welfare, National Institute for Occupational Safety and Health Rockville, MD **ORDER FROM: GPO-**EP1.23/5:680/4–73–002 $0.70 **NTIS-PB** 240 764/AS $3.75 |
| 680/4–74–001 | 1HA325 | **Accumulation of Tritium in Various Species of Fish Reared in Tritiated Water** BY R. G. Patzer, A. A. Moghissi, and D. N. McNelis, National Environmental Research Center, EPA Las Vegas, NV **ORDER FROM: NTIS-PB** 238 684/AS $3.25 |
| 680/4–74–002 | 1HA325 | **Polluted Groundwater: Estimating the Effects of Man's Activities (Formerly 600/4–74–002)** BY J. F. Karuvian, General Electric Company, Tempo, Center for Advanced Studies Santa Barbara, CA **ORDER FROM: NTIS-PB** 241 078/AS $5.75 |
| 680/4–74–003 | 1HA325 | **Rationale and Methodology for Monitoring Groundwater Polluted by Mining Activities (Formerly 600/4–74–003)** BY D. L. Warner, General Electric Company, Tempo, Center for Advanced Studies Santa Barbara, CA **ORDER FROM: NTIS-PB** 241 402/AS $4.75 |
| 680/4–75–001 | 1HA325 | **Handbook of Radiochemical Analytical Methods — Abstracted 600/9–75–001a** --BY F. B. Johns, National Environmental Research Center, EPA Las Vegas, NV **ORDER FROM: NTIS-PB** 240 621/AS $5.75 |
| 680/4–75–002a | 1HA327 | **Radioactivity Standards Distribution Program – 1975** Quality Assurance Research Laboratory, EPA Las Vegas, NV **ORDER FROM:** Pending |
| 680/4–75–002b | 1HA327 | **Environmental Radioactivity Laboratory Intercomparison Studies Program—1975** National Environmental Research Center, EPA Las Vegas, NV **ORDER FROM:** Pending |
| 680/4–75–003 | 1HA325 | **Development of a Biological Monitoring Network-A Test Case: Suitability of Livestock and Wildlife as Biological Monitors for Organophosphorus Contaminants** BY W. W. Sutton, National Environmental Research Center, EPA Las Vegas, NV BY L. L. Salomon, Dugway Proving Ground Dugway, UT **ORDER FROM:** Pending |

# TITLE INDEX

Abatement of Mine Drainage Pollution By Underground Precipitation – REF. NO. EPA-670/2–73–092
Absorption of SO2 by Alkaline Solutions in Venturi Scrubber Systems – REF. NO. EPA-650/2–73–003
Absorption of SO2 into Lime Slurries: Absorption Rates and Kinetics – REF. NO. EPA-650/2–73–047
Accumulation of Tritium in Various Species of Fish Reared in Tritiated Water – REF. NO. EPA-680/4–74–001
Acid Hydrolysis of Cellulose in Refuse to Sugar and Its Fermentation to Alcohol – REF. NO. EPA-670/2–73–011
Acquisition and Culture of Research Fish — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–011
Actions of Pesticides and Other Drugs on the Male Reproductive System – REF. NO. EPA-650/1–74–011
Activated Carbon Treatment of Unbleached Kraft Effluent for Reuse — Abstracted 600/9–75–001a — REF. NO. EPA-660/2–75–004
Activated Silica in Wastewater Coagulation – REF. NO. EPA-670/2–74–047
Activated Sludge – Bio-Disc Treatment of Distillery Wastewater – REF. NO. EPA-660/2–74–014
Activated Sludge Process Using Pure Oxygen – REF. NO. EPA-670/2–73–042
Activated Sludge Treatment Systems With Oxygen – REF. NO. EPA-670/2–73–073
Active Research Tasks Report, Fiscal Year 1973 – REF. NO. EPA-670/9–73–056
Activities and Needs Related to Radioactive Standards for Environmental Measurements: A Symposium held in Washington, DC, August 21, 1973 – REF. NO. EPA-670/4–75–006
Adsorption from Aqueous Solution – REF. NO. EPA-670/2–74–012
Adsorption of Odorous Pollutants by Active Manganese Dioxide – REF. NO. EPA-650/2–74–063
Advanced Automatic Control Strategies for the Activated Sludge Treatment Process – REF. NO. EPA-670/2–75–039
Advanced Prototype Direct Reading Instrument for Particulate Mass Measurement – REF. NO. EPA-650/2–74–065
Aerodynamic Control of Nitrogen Oxides and Other Pollutants from Fossil Fuel Combustion Volume II – Raw Data and Experimental Equipment – REF. NO. EPA-650/2–73–033b
Aerodynamic Control of Nitrogen Oxides and Other Pollutants From Fossil Fuel Combustion Volume I – Data Analysis and Summary of Conclusions – REF. NO. EPA-650/2–73–033a
Aerosol Formation from Gas-Phase Reactions of Ozone and Olefin in the Presence of Sulfur Dioxide – REF. NO. EPA-650/4–74–034
Aesthetics in Environmental Planning – REF. NO. EPA-600/5–73–009
Air Flotation – Biological Oxidation of Synthetic Rubber and Latex Wastewater – REF. NO. EPA-660/2–73–018
Air Pollution Effects on Catastrophic Failure of Metals – REF. NO. EPA-650/3–74–009
Air Pollution Exposure and Immunoglobulin Levels – REF. NO. EPA-650/1–75–005
Alum Addition to Activated Sludge With Tertiary Solids Removal – REF. NO. EPA-670/2–73–037
Aluminum as a Component of Solid Waste and a Recoverable Resource – REF. NO. EPA-670/5–74–005
Ammonia Nitrogen Removal By Breakpoint Chlorination – REF. NO. EPA-670/2–73–058
An Investigation of Ion Removed From Water and Wastewater – REF. NO. EPA-660/3–74–022
Anaerobic-Aerobic Lagoon Treatment of Dairy Manure Wastes – REF. NO. EPA-660/2–74–030
Analysis of the Abandoned Automobile Problem – REF. NO. EPA-670/2–73–013
Analysis of the Composition of the Atmosphere in the Los Angeles Basin – REF. NO. EPA-650/2–74–105
Analysis of the Current Impact of Plastic Refuse Disposal Upon the Environment — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–74–083
Analysis of the Dynamics of DDT in Marine Sediments — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–013
Analysis of Coprostanol, An Indicator of Fecal Contamination – REF. NO. EPA-660/2–74–021
Analysis of Cost Sharing Programs for Pollution Abatement of Municipal Wastewater – REF. NO. EPA-600/5–74–031
Analysis of Emissions from Outboard Two Cycle Marine Engines – REF. NO. EPA-670/2–75–061
Analysis of Nonpoint-Source Pollutants in the Missouri Basin Region — Abstracted 600/9–75–001a — REF. NO. EPA-600/5–75–004
Analysis of Pollution from Marine Engines and Effects on the Environment – REF. NO. EPA-670/2–75–062
Analysis of Pollution from Marine Engines and Effects on the Environment – Southern Lakes – REF. NO. EPA-670/2–75–063
Analysis of Pollution from Marine Engines and Effects on the Environment – Summary Report – REF. NO. EPA-670/2–75–064
Analysis of Pollution Control Costs – REF. NO. EPA-670/2–74–009
Analysis of Test Data for NOX Control in Gas and Oil-Fired Utility Boilers – REF. NO. EPA-650/2–75–012
Analysis Models for Solid Waste Collection — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–026a
Analysis Models for Solid Waste Collection — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–026b
Analytical Methodology Information Center: Activities for 1973 – 1974 – REF. NO. EPA-670/4–74–003a
Andersen Filter Substrate Weight Loss – REF. NO. EPA-650/2–75–022
Annual Report for Calendar Year 1972, Environmental Toxicology Research – REF. NO. EPA-670/1–73–036
Annual Report, 1972, NERC – Cincinnati – REF. NO. EPA-670/9–73–055
Applicability of the Meyers Process of Chemical Desulfurization of Coal: Initial Survey of Fifteen Coals – REF. NO. EPA-650/2–74–025
Application and Procurement of Automatic Wastewater Samplers — Abstracted 600/9–75–001a — REF. NO. EPA-670/4–75–003
Application of Automatic Data Processing Technology to Laboratory Problems – REF. NO. EPA-650/2–75–035
Application of Holographic Methods to the Measurement of Flames and Particulate – Volume II – REF. NO. EPA-650/2–74–031b
Application of Holographic Methods to the Measurement of Flames and Particulate – Volume 1 – REF. NO. EPA-650/2–74–031a
Application of Odor Technology to Mobil Sources Emission Instrumentation – REF. NO. EPA-650/2–73–025
Application of Repro-Modeling to the Analysis of a Photochemical Air Pollution Model – REF. NO. EPA-650/4–74–001

Preceding page blank

# TITLE INDEX

Applications of Growth and Sorption Algal Assays – REF. NO. EPA-660/3–73–023
Applications of Reverse Osmosis to Acid Mine Drainage Treatment – REF. NO. EPA-670/2–73–100
Applying Fabric Filtration to Coal Fired Industrial BoilersA Preliminary Pilot Scale Investigation – REF. NO. EPA-650/2–74–058
Appraisal of Neutralization Processes to Treat Coal Mine Drainage – REF. NO. EPA-670/2–73–093
Aqueous Odor Thresholds of Organic Pollutants in Industrial Effluents — Abstracted 600/9–75–001a — REF. NO. EPA-660/4–75–002
Asbestos Fiber Atlas – REF. NO. EPA-650/2–75–036
Assessing Effects on Water Quality by Boating Activity – REF. NO. EPA-670/2–74–072
Assessment and Development Plan for Monitoring of Organics in Storm Flows — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–74–087
Assessment of the Applicability of Automotive Emission Control Technology to Stationary Engines – REF. NO. EPA-650/2–74–051
Assessment of the Federal Noise Research, Development, and Demonstration Activities: FY 73 – FY 75 – REF. NO. EPA-600/2–75–010
Assessment of the Potential of Clean Fuels and Energy Technology – REF. NO. EPA-600/2–74–001
Assessment of Catalysts for Control of NOX from Stationary Power Plants, Phase I, Volume I – Final Report – REF.NO. EPA -650/2–75–001a
Assessment of Catalysts for Control of NOX from Stationary Power Plants, Phase I, Volume II – Data Bank Citation Indices – REF.NO. EPA -650/2–75–001b
Assessment of Economic Impact of Air Pollutants on Vegetation in the United States, 1969 and 1971 – REF. NO. EPA-650/5–73–002
Assessment of Particle Control Technology for Enclosed Asbestos Sources – REF. NO. EPA-650/2–74–088
Assessment of Wet Systems for Residential Refuse Collection: A Summary Report – REF. NO. EPA-670/2–74–068
Assessment Methodology for the Environmental Impact of Water Resource Projects – REF. NO. EPA-600/5–74–016
Atmospheric Emissions from the Asphalt Industry – REF. NO. EPA-650/2–73–046
Atmospheric Emissions from Asphalt Roofing Processes – REF. NO. EPA-650/2–74–101
Atmospheric Emissions From the Petroleum Refining Industry – REF. NO. EPA-650/2–73–017
Atmospheric Measurement of Photochemical Smog Reactions – A Preliminary Analysis – REF. NO. EPA-650/4–74–037
Atomic Absorption Analysis of Phosphates in Water – REF. NO. EPA-670/2–73–079
Automated Analysis of Individual Refractory Organics in Polluted Water – REF. NO. EPA-660/2–74–076
Bacterial Zoogloea Formation – REF. NO. EPA-670/2–74–018
Batch Disinfection of Treated Wastewater With Chlorine at Less Than 1 Degree C – REF. NO. EPA-660/2–73–005
Bench-Scale High-Rate Disinfection of Combined Sewer Overflows With Chlorine and Chlorine Dioxide – REF. NO. EPA-670/2–75–021
Benefit of Water Pollution Control on Property Values – REF. NO. EPA-600/5–73–005
Bibliography of the Cat – REF. NO. EPA-650/3–74–001
Bibliography of Publications and Reports of the Pacific Northwest Environmental Research Laboratory – REF. NO. EPA-660/9–74–001
Bibliography of R&D Research Reports – July 1973 – REF. NO. EPA-600/5–73–002
Bibliography of Water Pollution Control Benefits and Costs – REF. NO. EPA-600/5–74–028
Big Eddies and Mixing Processes in the Great Lakes – REF. NO. EPA-660/3–73–011
Bile on Hydrologic Modifications (HYMOD) – REF. NO. EPA-600/2–75–007b
Bio-Environmental Impact of Air Pollution from Fossil Fuel Power Plants – REF. NO. EPA-660/3–74–011
Biological Control of Aquatic Vegetation – REF. NO. EPA-660/3–74–007
Biological Conversion of Animal Wastes to Nutrients – REF. NO. EPA-670/2–73–009
Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents – REF. NO. EPA-670/4–73–001
Biological Models of Freshwater Communities – REF. NO. EPA-660/3–73–008
Biological Treatment of Combined Sewer Overflow at Kenosha, Wisconsin – REF. NO. EPA-670/2–75–019
Biological Treatment of Concentrated Sugar Beet Wastes – REF. NO. EPA-660/2–74–028
Biologically Allowable Thermal Pollution Limits, Parts I and II – REF. NO. EPA-6[illegible]0/3–74–003
Boiler Modification Cost Survey for Sulfur Oxides Control by Fuel Substitution – REF. NO. EPA-650/2–74–123
Braxton Sonic Agglomerator Evaluation – REF. NO. EPA-650/2–74–036
Brine Disposal Treatment Practices Relating to the Oil Production Industry – REF. NO. EPA-660/2–74–037
BOD, Solids and Nutrient Removal By Foam Flotation – REF. NO. EPA-670/2–73–096
Cadmium in the Environment – III A Toxicological and Epidemiological Appraisal – REF. NO. EPA-650/2–75–049
California Environmental Quality Act: Innovation in State and Local Decision making – REF. NO. EPA-600/5–74–023
Can Federal Procurement Practices be Used to Reduce Solid Waste – REF. NO. EPA-670/5–74–003
Capacity of the Soil as a Natural Sink for Carbon Monoxide – REF. NO. EPA-650/2–73–043
Carbon, Nitrogen, and Phosphorus Removal in Staged NitrificationDenitrification Treatment – REF. NO. EPA-670/2–75–052
Carbonate Bonding of Taconite Tailings – REF. NO. EPA-670/2–74–001
Carrying Capacity in Regional Environmental Management – REF. NO. EPA-600/5–74–021
Case Study and Business Analysis of the Scrap Industry – REF. NO. EPA-670/5–74–002
Catalytic Combustion, a Pollution-Free Means of Energy Conversion – REF. NO. EPA-650/2–73–018
Catalytic Oxidation of Sulfur Dioxide Using Isotopic Tracers – REF. NO. EPA-650/2–73–020
Catalyzed Bio-Oxidation and Tertiary Treatment of Integrated Textile Wastewaters – REF. NO. EPA-660/2–74–039
Changes in the Global Energy Balance – REF. NO. EPA-650/2–74–116
Characterization and Control of Asbestos Emissions from Open Sources – REF. NO. EPA-650/2–74–090
Characterization and Treatment of Combined Sewer Overflows – REF. NO. EPA-670/2–75–054
Characterization and Treatment of Urban Land Runoff — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–096
Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. I – Summary – REF. NO. EPA-670/2–75–033a

# TITLE INDEX

**Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. II – Municipal Sludges – REF. NO. EPA-670/2–75–033b**
**Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. III – Utility Coal Ash – REF. NO. EPA-670/2–75–033c**
**Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. IV – Municipal Incinerator Residues – REF.NO.** EPA -670/2–75–033d
**Characterization of Atmospheric Emissions from Polyurethane Resin Manufacture – REF. NO. EPA-650/2–74–107**
**Characterization of Vessel Waste in Duluth-Superior Harbor — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–097**
**Characterization of Waste Waters from the Ethical Pharmaceutical Industry – REF. NO. EPA-670/2–74–057**
**Charged Droplet Scrubbing of Submicron Particulate – REF. NO. EPA-650/2–74–075**
**Chemical and Physical Characterization of Automotive Exhaust Particulate Matter in the Atmosphere (Year Ending June 30, 1972) – REF. NO. EPA-650/2–73–001**
**Chemical and Physical Characterization of Automotive Exhaust Particulate Matter in the Atmosphere (Year Ending June 30, 1973) – REF. NO. EPA-650/2–73–002**
**Chemical Characterization of Model Aerosols – REF. NO. EPA-650/3–74–011**
**Chemical Conversion of Solid Waste to Useful Products – REF. NO. EPA-670/2–74–027**
**Chemical Conversion of Wood and Cellulosic Wastes – REF. NO. EPA-670/2–74–015**
**Chemical Impact of Snow Dumping Practices – REF. NO. EPA-670/2–74–086**
**Chemical/Physical and Biological Treatment of Wool Processing Wastes – REF. NO. EPA-660/2–73–036**
**Chemically Active Fluid-Bed Process for Sulphur Removal During Gasification of Heavy Fuel Oil—Second Phase – REF.NO.** EPA -650/2–73–039
**Chemically Active Fluid-Bed Process for Sulphur Removal During Gasification of Heavy Fuel Oil – Second Phase – REF.NO.** EPA -650/2–74–109
**Chemistry of Organmercurials in Aquatic Systems – REF. NO. EPA-660/3–73–012**
**Chena River—A Study of a Subarctic Stream – REF. NO. EPA-660/3–75–019**
**Chlorinated Hydrocarbons in the Lake Ontario Ecosystem (IFYGL) – REF. NO. EPA-660/3–75–022**
**Cladophora Distribution in Lake Ontario (IFYGL) — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–74–028**
**Coke Charging Pollution Control Demonstration – REF. NO. EPA-650/2–74–022**
**Coke Oven Charging Emission Control Test Program – Supplemental Observations – REF. NO. EPA-650/2–74–062a**
**Coke Oven Charging Emission Control Test Program—Volume I – REF. NO. EPA-650/2–74–062**
**Coke Oven Smokeless Pushing System Design Manual – REF. NO. EPA-650/2–74–076**
**Coliform Bacteria Growth and Control in Aerated Stabilization Basins – REF. NO. EPA-660/2–73–028**
**Collaborative Study of EPA Methods 5,6, and 7 in Fossil Fuel-Fired Steam Generators – REF. NO. EPA-650/4–74–013**
**Collaborative Study of Method for the Determination of Nitrogen Oxide Emissions from Stationary Sources (Fossil Fuel-Fired Steam Generators) – REF. NO. EPA-650/4–74–025**
**Collaborative Study of Method for the Determination of Nitrogen Oxide Emissions from Stationary Sources (Nitric Acid Plants) – REF. NO. EPA-650/4–74–028**
**Collaborative Study of Method for the Determination of Particulate Matter Emissions From Stationary Sources (Fossil Fuel-Fired Steam Generators) – REF. NO. EPA-650/4–74–021**
**Collaborative Study of Method for the Determination of Particulate Matter Emissions from Stationary Sources (Municipal Incinerators) – REF. NO. EPA-650/4–74–022**
**Collaborative Study of Method for the Determination of Particulate Emissions from Stationary Sources (Portland Cement Plants) – REF. NO. EPA-650/4–74–029**
**Collaborative Study of Method for the Determination of Sulfur Dioxide Emissions From Stationary Sources (Fossil Fuel-Fired Steam Generators) – REF. NO. EPA-650/4–74–024**
**Collaborative Study of Method for the Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources – REF. NO. EPA-650/4–75–003**
**Collaborative Study of Method for Determination of Stack Gas Velocity and Volumetric Flow Rate in Conjunction with EPA Method 5 – REF. NO. EPA-650/4–74–033**
**Collaborative Study of Method for Stack Gas Analysis and Determination of Moisture Fraction with Use of Method 5 – REF.NO.** EPA -650/4–74–026
**Collaborative Study of Method 10 – Reference Method for Determination of Carbon Monoxide Emissions from Stationary Sources – Report of Testing – REF. NO. EPA-650/4–75–001**
**Collaborative Study of Method 104 – Reference Method for Determination of Beryllium Emission from Stationary Sources – REF.NO. EPA -650/4–74–023**
**Collaborative Study of Reference Method for Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method) (24-hour Sampling) – REF. NO. EPA-650/4–74–027**
**Collaborative Test of the Continuous Colori-Metric Method for Measurement of Nitrogen Dioxide in Ambient Air – REF.NO.** EPA -650/4–75–011
**Collaborative Test of the TGS-ANSA Method for Measurement of Nitrogen Dioxide in Ambient Air – REF. NO. EPA-650/4–74–046**
**Collaborative Testing Methods for Measurements of NO2 in Ambient Air Volume I – Report of Testing – REF. NO. EPA-650/4–74–019a**
**Color Characterization Before and After Lime Treatment – REF. NO. EPA-660/2–74–029**
**Color Removal and Sludge Disposal Process for Kraft Mill Effluents – REF. NO. EPA-660/2–74–008**
**Color Removal From Kraft Mill Effluents By Ultrafiltration – REF. NO. EPA-660/2–73–019**
**Combined Sewer Overflow Seminar Papers – REF. NO. EPA-670/2–73–077**
**Combined Sewer Overflow Treatment by the Rotating Biological Contactor Process – REF. NO. EPA-670/2–74–050**

# TITLE INDEX

Combustion Control of Pollutants from Multiburner Coal-fired System – REF. NO. EPA-650/2–74–038
Combustion Products from the Incineration of Plastics – REF. NO. EPA-670/2–73–049
Combustion Toilet for Use on Small Boats – REF. NO. EPA-670/2–74–053
Compact Sampling System for Collection of Particulates from Stationary Sources – REF. NO. EPA-650/2–74–029
Comparability of Nine Methods for Monitoring NO2 in Ambient Air – REF. NO. EPA-650/4–74–012
Comparison of Germanium Detectors for Neutron Activation Analysis for Mercury – REF. NO. EPA-660/2–74–045
Composted Municipal Refuse as a Soil Amendment – REF. NO. EPA-670/2–73–063
Comprehensive Management of Phosphorus Water Pollution – REF. NO. EPA-600/5–74–010
Comprehensive Technical Report on all Atmospheric Contaminants Associated with Photochemical Air Pollution – REF.NO. EPA -650/4–75–002
Computer Management of a Combined Sewer System – REF. NO. EPA-670/2–74–022
Concepts for Development of Field Usable Test Atmosphere Generating Devices – REF. NO. EPA-650/4–74–016
Conceptual Model for the Movement of Pesticides Through the Environment – REF. NO. EPA-660/3–74–024
Conditioning of Fly Ash with Sulfamic Acid, Ammonium Sulfate, and Ammonium Bisulfact – REF. NO. EPA-650/2–74–114
Conference on Recycling Treated Municipal Wastewater Through Forest and Cropland – REF. NO. EPA-660/2–74–003
Continuous Inplant Hot Gas Blanching of Vegetables – REF. NO. EPA-660/2–74–091
Continuous Measurement of Total Gas Flowrate from Stationary Sources – REF. NO. EPA-650/2–75–020
Contributions of Urban Roadway Usage to Water Pollution – REF. NO. EPA-600/2–75–004
Control of Environmental Impacts From Advanced Energy Sources – REF. NO. EPA-600/2–74–002
Control of Sulfur Dioxide Emissions from Copper Smelters: Volume I – Steam Oxidation of Pyritic Copper Concentrates – REF.NO. EPA -650/2–74–085a
Control of Sulfur Dioxide Emissions from Copper Smelters: Volume II – Hydrogen Sulfide Production from Copper Concentrates – REF. NO. EPA-650/2–74–085b
Control Schemes for the Activated-Sludge Process – REF. NO. EPA-670/2–74–069
Control Technology for Fine Particulate Emissions – REF. NO. EPA-650/2–74–027
Controlling Sulfides in Sanitary Sewers Using Air and Oxygen – REF. NO. EPA-670/2–75–060
Conversion of Cattle Feedlot Wastes to Ammonia Synthesis Gas – REF. NO. EPA-660/2–74–090
Copper Recovery from Brass Mill Discharge by Cementation with Scrap Iron — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–75–029
Cost of Dissolved Air Flotation Thickening of Waste Activated Sludge at Municipal Sewage Treatment Plants – REF.NO. EPA -670/2–74–011
Cost Evaluation of Alternative Air Quality Strategies – REF. NO. EPA-600/5–74–003
Cost-Effective Design Based Upon Field Derived Parameters – REF. NO. EPA-670/2–74–062
Cost-Effectiveness of a Uniform National Sulfur Emissions Tax – REF. NO. EPA-600/5–74–009
Costs of Filter Pressing Domestic Sewage Sludges – REF. NO. EPA-670/2–74–006
Costs of Hauling and Land Spreading of Domestic Sewage Treatment Plant Sludge – REF. NO. EPA-670/2–74–010
Countermeasures for Pollution From Overflow – The State of the Art — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–090
Crankcase Drainage from In-Service Out-board Motors — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–092
Criteria for Regional Solid Waste Management Planning — Abstracted 600/9–75–001a — REF. NO. EPA-670/5–74–006
Critique of Pollution Time Allocation in River Basin Model – REF. NO. EPA-600/5–73–007
Crop Insurance and Information Services to Control Use of Pesticides – REF. NO. EPA-600/5–74–018
Culturing and Ecology of Diaptomus Clavipes and Cyclops Vernalis – REF. NO. EPA-660/3–74–006
Degradation Mechanism: Controlling the Bioaccumulation of Hazardous Materials — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–75–005
Demetallization of Heavy Residual Oils – REF. NO. EPA-650/2–73–041
Demetallization of Heavy Residual Oils – Phase II – REF. NO. EPA-650/2–73–041a
Demonstrated Technology and Research Needs for Reuse of Municipal Wastewater – REF. NO. EPA-670/2–75–038
Demonstration of a High-Rate Activated Sludge System – REF. NO. EPA-670/2–75–037
Demonstration of a Non-Aqueous Sewage Disposal System – REF. NO. EPA-670/2–73–088
Demonstration of a State Water Quality Management Information System – REF. NO. EPA-600/5–74–022
Demonstration of the Separation and Disposal of Concentrated Sediments – REF. NO. EPA-660/2–74–072
Demonstration of Reduced Hydrocarbon Emissions from Gasoline Loading Terminals – REF. NO. EPA-650/2–75–042
Demonstration of Thermal Water Utilization in Agriculture – REF. NO. EPA-660/2–74–011
Demonstration of Three Recirculating Swine Waste Management Systems – REF. NO. EPA-660/2–74–009
Demonstration of Waste Flow Reduction from Households – REF. NO. EPA-670/2–74–071
Design and Control of Incinerators, Volume I – REF. NO. EPA-670/2–73–089A
Design and Control of Incinerators, Volume II – Appendices – REF. NO. EPA-670/2–73–089B
Design and Performance Considerations for a Pilot Process for Separating Mixed Municipal Refuse – REF. NO. EPA-670/2–75–040
Design and Simulation of Equalization Basins – REF. NO. EPA-670/2–73–046
Design of an Optimum Distillate Oil Burner for Control of Pollutant Emissions – REF. NO. EPA-650/2–74–047
Design of the EPA Semi-Trailer Mobile Air Pollution Laboratory – REF. NO. EPA-650/4–74–017
Design of Cost-Effective Water Quality Surveillance Systems – REF. NO. EPA-600/5–74–004
Design Development and Fabrication of a Prototype High-Vol. Particulate Mass Sampling Train – REF. NO. EPA-650/2–74–067
Design Parameters for Animal Waste Treatment Systems – REF. NO. EPA-660/2–74–063

# TITLE INDEX

Design Trends and Operating Problems in Combustion Modification of Industrial Boilers – REF. NO. EPA-650/2–74–032
Design, Construction, and Testing of a Commercial Prototype Disc Diluter – REF. NO. EPA-650/2–74–055
Design, Development, and Field Test of a Droplet Measuring Device – REF. NO. EPA-650/2–75–018
Design, Fabricate, and Demonstrate an Instrument for Assaying Benzo (a) Pryrene – REF. NO. EPA-650/2–74–068
Design, Fabrication, and Installation of a Particulate Aerodynamic Test Facility – REF. NO. EPA-650/2–74–103
Detailed Cost Estimates For Advanced Effluent Desulfurization Processes – REF. NO. EPA-600/2–75–006
Determination of the Formation Mechanisms and Composition of Photochemical Aerosols – REF. NO. EPA-650/3–73–002
Determination of Coronal Ozone Production by High Voltage Power Transmission Lines – REF. NO. EPA-650/4–73–003
Determination of Effect of Particulate Exhaust Emissions of Additives and Impurities in Gasoline – REF. NO. EPA-650/2–74–061
Determination of Energetic Characteristics of Urban-Rural Surfaces in the Greater St. Louis Area – REF. NO. EPA-650/4–74–007
Determination of Hazardous Elements in Smelter-Produced Sulfuric Acid – REF. NO. EPA-650/2–74–131
Determination of Molecular Hydrogen Sulfide — Abstracted 600/9–75–001a — REF. NO. EPA-660/4–75–001
Determination of Volatile Organic Compounds at the UG/1 Level in Water by Gas Chromatography – REF. NO. EPA-670/4–74–009
Development and Evaluation Report: Physical Chemical Marine Sanitation System – REF. NO. EPA-670/2–74–043
Development and Fabrication of Mass Emission Data and Control System for the Stationary Source Simulator – REF.NO. EPA -650/2–73–009
Development and Testing of An Air Monitoring System – REF. NO. EPA-650/2–74–019
Development of a Biological Monitoring Network-A Test Case: Suitability of Livestock and Wildlife as Biological Monitors for Organophosphorus Contaminants – REF. NO. EPA-680/4–75–003
Development of a Decision Room For Environmental Studies – REF. NO. EPA-600/5–73–011
Development of a High-Purity for High Temperature Particulate Sampling and Analysis – REF. NO. EPA-650/2–73–032
Development of a Methodology for the Assessment of the Effects of Fuels and Additives on Control Devices – REF.NO. EPA -650/2–74–060
Development of a Monthly Industrial Technology Bulletin – REF. NO. EPA-600/2–74–007
Development of a Monthly Technology Bulletin – REF. NO. EPA-600/2–74–005
Development of a Prototype Nitrate Detector – REF. NO. EPA-650/2–74–133
Development of a Prototype Sulfuric Acid Monitor – REF. NO. EPA-650/2–75–013a
Development of a Selective Algaecide to Control Nuisance Algal Growth – REF. NO. EPA-660/3–73–006
Development of a Supplementary Emission Measurements Monitoring System – REF. NO. EPA-650/2–73–008
Development of an Acetylene Monitor at the PPB Level – REF. NO. EPA-650/2–74–056
Development of an Approach to Identification of Emerging Technology and Demonstration Opportunities – REF. NO. EPA-650/2–74–048
Development of an Instrumental Monitoring Method for Measurement of Asbestos Concentrations in or Near Sources – REF.NO. EPA -650/2–73–016
Development of A Gas Laser System to Measure Trace Gases by Long Path Absorption Techniques: Volume II – Field Evaluation of Gas Laser System for Ozone Monitoring Final Report – REF. NO. EPA-650/2–74–046b
Development of Air Particulate Monitoring Systems – REF. NO. EPA-650/4–74–030
Development of Analytic Techniques to Measure Human Exposure to Fuel Additives – REF. NO. EPA-650/1–74–003
Development of Field Applied DDT – REF. NO. EPA-660/2–74–036
Development of Gas Laser System to Measure Trace Gases by Longpath Absorption Techniques:Volume I – Gas Laser System Modification for Ozone Monitoring Final Report – REF. NO. EPA-650/2–74–046a
Development of Instrumentation for Measurement of Stationary Source Aldehyde Organic Acid and Amine Emissions – REF.NO. EPA -650/2–73–010
Development of Instrumentation for Quantitative Collection of Total Atmospheric Mercury From Ambient Air-Final Report – REF.NO. EPA -650/2–73–052
Development of Low Pressure Impactor – REF. NO. EPA-650/2–74–014
Development of Method for Carcinogenic Vapor Analysis in Ambient Atmospheres · REF. NO. EPA-650/2–74–121
Development of Modeling Technique for Photochemical Air Pollution – REF. NO. EPA-650/4–74–003
Development of On-Shore Treatent System for Sewage from Watercraft Retention System – REF. NO. EPA-670/2–74–056
Development of Phosphate – Free Heavy Duty Detergents – REF. NO. EPA-600/2–74–003
Development of Predictions of Future Pollution Problems – REF. NO. EPA-600/5–74–005
Development of Range Squared and Off-Gating Modifications for a Lidar System – REF. NO. EPA-650/2–73–040
Development of Sample Preparation Methods for Development of Marine Organisms – REF. NO. EPA-660/3–74–026
Development of Sampling and Analytical Methods of Lime/Limestone Wet Scrubbing Tests – REF. NO. EPA-650/2–74–024
Development of Sampling Devices for Gaseous Atmospheric Tracers – REF. NO. EPA-650/4–74–050
Development of Sampling Method for Total Atmospheric Selenium – REF. NO. EPA-650/2–74–124
Development of Sampling Procedures for Polycyclic Organic Matter and Polychlorinated Biphenyls – REF. NO. EPA-650/2–75–007
Development of Scanning Electron Microscopy for Measurement of Airborne Asbestos Concentrations – REF. NO. EPA-650/2–75–029
Development of Selective Hydrocarbon Sampling System and Field Evaluation with Conventional System – REF. NO. EPA-650/2–75–050
Development of Technical Specifications for Standard Gas-Diluent Mixtures for Use in Measurement of Mobile Source Emissions – REF. NO. EPA-650/4–74–020
Development of X-Ray Fluorescence Spectroscopy in Element Analysis of Particulate Matter Phase II: Evaluation of Commerical Multiple Crystal Spectrometer Instruments – REF. NO. EPA-650/2–73–006
Device Collection and Assay of Ambient Gases – REF. NO. EPA-650/2–74–006
Devices for On – Board Treatment of Waste from Vessels — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–091

# TITLE INDEX

Diffusion in Turbulent Surface Layer and the Development of an Atmospheric Wind Tunnel – REF. NO. EPA-650/4–74–041
Direct Determination of Metals in Air – REF. NO. EPA-650/2–73–011
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Summary Report – REF. NO. EPA-670/2–75–050a
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix A. Weather and Lake Level Data, Water Quality Data, and Raw Water Pumping Schedule – REF. NO. EPA-670/2–75–050b
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix B. Design, Installation and Operation of Pilot Filters. Appendix C. Summary of Data for Individual Filter Runs – REF. NO. EPA-670/2–75–050c
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix D. Head Loss and Turbidity Curves for Individual Filter Runs – REF. NO. EPA-670/2–75–050d
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix E. Ontario Research Foundation Electron Microscope Analysis Results. Appendix F. EPA National Water Quality Laboratory X-Ray Diffraction Analysis Results. Appendix G. University of Minnesota at Duluth Electron Microscope Analysis Results – REF. NO. EPA-670/2–75–050e
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix H. Comparison of Turbidimeters – REF.NO. EPA -670/2–75–050f
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix I. Diatomite Filters for Asbestiform Fiber Removal from Water – REF. NO. EPA-670/2–75–050g
Direct Use of Coal in a Fuel Cell: Feasibility Investigation – REF. NO. EPA-650/2–75–040
Directory of EPA, State and Local Environmental Quality Monitoring and Assessment Activities – REF. NO. EPA-600/4–75–001
Disinfection of Sewage Effluents – REF. NO. EPA-670/2–73–029
Dispersal Processes in Lake Huron – REF. NO. EPA-660/2–74–082
Dispersion in Hydrologic and Coastal Environments – REF. NO. EPA-660/3–73–010
Disposal and Utilization of Waste Kiln Dust From Cement Industry – REF. NO. EPA-670/2–75–043
Disposal of By-products from Non-regenerable Flue Gas Desulfurization Systems: Initial Report – REF. NO. EPA-650/2–74–037a
Distributions of Industrial and Commercial-Institution External Combustion Boilers – REF. NO. EPA-650/2–75–021
Dry Caustic Heating of Clingstone Peaches on a Commercial Scale – REF. NO. EPA-660/2–74–092
Dual Functioning Swirl Combined Sewer Overflow Regulator/ Concentrator – REF. NO. EPA-670/2–73–059
Dynactor Scrubber Evaluation – REF. NO. EPA-650/2–74–082a
Dynamic Water Quality Forecasting and Management – REF. NO. EPA-660/3–73–009
Dynamics and Diffusion in the Great Lakes – REF. NO. EPA-660/2–74–083
Early Life History and Feeding of Young Mountain Whitefish – REF. NO. EPA-660/3–73–019
Economic and Environmental Benefits from Improving Electrical Rate Structures – REF. NO. EPA-600/5–74–033
Economic and Technological Impediments to Recycling Obsolete Ferrous Solid Waste – REF. NO. EPA-670/5–73–021
Economic Analysis of the Processing and Disposal of Refuse Sludges – REF. NO. EPA-670/2–74–037
Economic Damages of Air Pollution – REF. NO. EPA-600/5–74–012
Economic Damages to Household Systems From Water Supply Use – REF. NO. EPA-600/5–73–001
Economic Disincentives for Pollution Control: Legal Political and Administrative Dimensions – REF. NO. EPA-600/5–74–026
Effect of Carbon to Nitrogen Ratio on Activated Sludge Subsidence and Dewatering Characteristics – REF. NO. EPA-670/2–74–025
Effect of Carbon Monoxide on Time Perception – REF. NO. EPA-650/1–74–005
Effect of Fuel Additives Study – REF. NO. EPA-650/2–74–096
Effect of Gas Turbine Efficiency and Fuel Cost on Cost Producing Electric Power – REF. NO. EPA-650/2–74–041
Effect of Gasoline Additives on Gaseous Emissions – REF. NO. EPA-650/2–75–014
Effect of Geographical Variation on Performance of Recirculating Cooling Ponds – REF. NO. EPA-660/2–74–085
Effect of Meteorological Variables on Temperature Changes in Flowing Streams — Abstracted 600/9–75–001a — REF.NO. EPA -660/3–75–002
Effect of Mirex and Carbofuran on Estuarine Microorganisms – REF. NO. EPA-660/3–75–024
Effect of Phosphorus Removal Processes on Algal Growth – REF. NO. EPA-660/3–73–015
Effect of Processing Poultry Manure on Disease Agents – REF. NO. EPA-670/2–73–041
Effectiveness of Selected Fuel Additives in Controlling Pollution Emissions From Residual Oil-Fired Boilers – REF. NO. EPA-650/2–73–031
Effects of Air Pollutants on Textile Fibers and Dyes – REF. NO. EPA-650/3–74–008
Effects of Crude Oil and Some of Its Components on Young Coho and Sockeye Salmon – REF. NO. EPA-660/3–73–018
Effects of Design and Operating Variables on NOx from Coal-Fired Furnaces— Phase I – REF. NO. EPA-650/2–74–002a
Effects of Design and Operating Variables on NOX from Coal-Fired Furnaces – Phase II – REF. NO. EPA-650/2–74–002b
Effects of Exhaust from Two-Cycled Outboard Engines – REF. NO. EPA-670/2–74–063
Effects of Forest Fires on Water Quality in Interior Alaska – REF. NO. EPA-660/3–75–020
Effects of Mirex and Methoxychlor on Striped Mullet, Mugil cephalus L. — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–015
Effects of Nozzle Design and Sampling Techniques on Aerosol Measurements – REF. NO. EPA-650/2–74–070
Effects of Protozoa on the Fate of Particulate Carbon – REF. NO. EPA-660/3–73–007
Effects of Temperature on Diseases of Salmonid Fishes – REF. NO. EPA-660/3–73–020
Effects of Water Pollution Controls on Solid Waste Generation, 1971 to 1985: Executive Summary — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–095a
Efficiencies in Power Generation – REF. NO. EPA-650/2–74–021
Electrochemical Carbon Regeneration – REF. NO. EPA-670/2–75–028
Electrochemical Removal of Heavy Metals from Acid Mine Drainage – REF. NO. EPA-670/2–74–023
Electrostatic Precipitator Performance Model – REF. NO. EPA-650/2–74–132

# TITLE INDEX

Enclosed Coke Pushing and Quenching System Design Manual – REF. NO. EPA-650/2–73–028
Energy Consumption: Paper, Stone/Clay/Glass/Concrete, and Food Industries – REF. NO. EPA-650/2–75–032c
Energy Consumption: The Chemical Industry – REF. NO. EPA-650/2–75–032a
Energy Consumption: The Primary Metals and Petroleum Industries – REF. NO. EPA-650/2–75–032b
Enforcement Economics in Air Pollution Control – REF. NO. EPA-600/5–73–014
Enhancing Trickling Filter Plant Performance By Chemical Precipitation – REF. NO. EPA-670/2–73–060
Entrainment Seperators for Scrubbers – Initial Report – REF. NO. EPA-650/2–74–119a
Environment: A Bibliography of Social Science and Related Literature – REF. NO. EPA-600/5–74–011
Environmental Applications of Advanced Instrumental Analyses: Assistance Projects, FY '73 – REF. NO. EPA-660/2–74–078
Environmental Applications of Advanced Instrumental Analysis: Assistance Projects, FY 72 – REF. NO. EPA-660/2–73–013
Environmental Assessment of Future Disposal Methods for Plastics in Municipal Solid Waste – REF. NO. EPA-670/2–75–058
Environmental Base and Management Study – Atchafalaya Basin, Louisiana – REF. NO. EPA-600/5–75–006
Environmental Chamber Studies of Atmospheric Aerosols – REF. NO. EPA-650/4–74–009
Environmental Consideration in Future Energy Growth – REF. NO. EPA-600/5–73–004
Environmental Considerations for Oil Shale Development – REF. NO. EPA-650/2–74–099
Environmental Exposure System for Studying Air Pollution Damage to Materials – REF. NO. EPA-650/3–75–001
Environmental Guidelines for Development Roads in the Subarctic – REF. NO. EPA-660/3–74–009
Environmental Impact Requirements in the States: NEPA's Offspring – REF. NO. EPA-600/5–74–006
Environmental Management and Local Government – REF. NO. EPA-600/5–73–016
Environmental Protection in Surface Mining of Coal – REF. NO. EPA-670/2–74–093
Environmental Radioactivity Laboratory Intercomparison Studies Program, 1973 – 1974 – REF. NO. EPA-680/4–73–001b
Environmental Radioactivity Laboratory Intercomparison Studies Program—1975 – REF. NO. EPA-680/4–75–002b
Environmental Requirements and Pollution Tolerance of Freshwater Diatoms – REF. NO. EPA-670/4–74–005
Environmental Requirements of Selected Estuarine Ciliated Protozoa – REF. NO. EPA-660/3–74–031
Environmental Research in 1973, Annual Report – REF. NO. EPA-670/9–74–001
Environmental Research Publications – REF. NO. EPA-670/9–73–004
Environmental Research Publications 1971–1975 — Abstracted 600/9–75–001a — REF. NO. EPA-670/9–75–001
Epidemiology of Chronic Respiratory Disease: A Literature Review – REF. NO. EPA-650/1–74–007
Equimolar NO2 Absorption into Magnesia Slurry – A Pilot Feasibility Study – REF. NO. EPA-650/2–73–015
Estimating Nutrient Loadings of Lakes from Non-Point Sources – REF. NO. EPA-660/3–74–020
Estimating Water Quality Benefits – REF. NO. EPA-600/5–74–014
Estimation of Polychlorinated Biphenyls in the Presence of Dot-Type Compounds – REF. NO. EPA-670/4–74–004
Eutrophication of Lake Tahoe Emphasizing Water Quality – REF. NO. EPA-660/3–74–034
Eutrophication of Surface Waters—Lake Tahoe's Indian Creek Reservoir — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–003
Evaluation and Collaborative Study of Method for Visual Determination of Opacity of Emissions from Stationary Sources – REF.NO. EPA -650/4–75–009
Evaluation and Demonstration of the Capillary Suction Sludge Dewatering Device – REF. NO. EPA-670/2–74–017
Evaluation and Modification of Fluoride Sampling and Analytical Methods – REF. NO. EPA-650/2–73–007
Evaluation of a Computer Program for GC-MS Specific Ion Monitoring – REF. NO. EPA-660/2–74–002
Evaluation of a Microwave-Induced Plasma Spectrometer for Trace Analysis – REF. NO. EPA-660/2–73–009
Evaluation of the Arsenite Procedure for the Determination of Nitrogen Dioxide in Ambient Air – REF. NO. EPA-650/4–74–048
Evaluation of the Bio-Disc Treatment Process for Summer Camp Application – REF. NO. EPA-670/2–73–022
Evaluation of the Fluidized-Bed Combustion Process Volume I – Pressurized Fluidized-Bed Combustion Process Development and Evaluation – REF. NO. EPA-650/2–73–048a
Evaluation of the Fluidized-Bed Combustion Process Volume II – Fluidized Bed Boiler Combined-Cycle Power Plant Development—Volume I Appendices – REF. NO. EPA-650/2–73–048b
Evaluation of the Fluidized-Bed Combustion Process Volume III – Pressurized Fluidized-Bed Boiler Development Plant Design – REF.NO. EPA -650/2–73–048c
Evaluation of the Fluidized-Bed Combustion Process Volume IV – Fluidized-Bed Gasification Desulfurization – REF.NO. EPA -650/2–73–048d
Evaluation of the Regenerative Pressurized Fluidized-Bed Combustion Process – REF. NO. EPA-650/2–74–012
Evaluation of the Ryan's Waterproof Thermograph (Model F-30) – REF. NO. EPA-670/4–74–007
Evaluation of the Triethanolamine Procedure for the Determination of Nitrogen Dioxide in Ambient Air – REF. NO. EPA-650/4–74–031
Evaluation of Adjustment Assistance Program with Application for Pollution Control – REF. NO. EPA-600/5–74–029
Evaluation of Aeronetic Two-Phase Jet Scrubber – REF. NO. EPA-650/2–74–129
Evaluation of Alternative Methods For Financing Municipal Waste Treatment Works – REF. NO. EPA-600/5–75–001
Evaluation of Centrifield Scrubber – REF. NO. EPA-650/2–74–129a
Evaluation of Drainage for Salinity Control in Grand Valley – REF. NO. EPA-660/2–74–084
Evaluation of Equations for Designing Ammoniacal Scrubbers to Remove Sulfur Oxides from Waste Gas – REF. NO. EPA-650/2–74–035
Evaluation of Feasibility and Economic Implication of Pricing Mechanisms in Solid Waste Management — Abstracted 600/9–75–001a —– REF. NO. EPA-670/5–75–001
Evaluation of Flame Emission Determination of Phosphorus in Water – REF. NO. EPA-660/2–73–007
Evaluation of Health Hazards Associated With Solid Waste Sewage Sludge Mixtures – REF. NO. EPA-670/2–75–023
Evaluation of Instrumentation for Monitoring Total Mercury Emissions from Stationary Sources – REF. NO. EPA-650/2–74–039

# TITLE INDEX

Evaluation of Irrigation Scheduling for Salinity Control in Grand Valley – REF. NO. EPA-660/2–74–052
Evaluation of Low-Sulfur Western Coal Characteristics, Utilization, and Combustion Experience – REF. NO. EPA-650/2–75–046
Evaluation of Marketable Effluent Permit Systems – REF. NO. EPA-600/5–74–030
Evaluation of MTF for Testing Hazardous Material Spill Control Equipment – REF. NO. EPA-670/2–74–073
Evaluation of Odor Measurement Techniques Volume I – Animal Rendering Industry – REF. NO. EPA-650/2–74–008a
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification; Section I: Synthane Process – REF.NO. EPA -650/2–74–009b
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Liquefaction: Section 2. SRC Process – REF. NO. EPA-650/2–74–009f
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification: Section 5. BI-GAS Process – REF.NO. EPA -650/2–74–009g
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification Section I: Koppers-Totzek Process – REF.NO. EPA -650/2–74–009a
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification; Section I: CO2 Acceptor Process – REF.NO. EPA -650/2–74–009d
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Liquefaction: Section I. COED Process – REF. NO. EPA-650/2–74–009e
Evaluation of Pollution Control in Fossil Fuel Conversion Processess Gasification; Section I; Lurgi Process – REF. NO. EPA-650/2–74–009c
Evaluation of Polymeric Clarification of Meat-Packing and Domestic Wastewaters – REF. NO. EPA-660/2–74–020
Evaluation of Prechamber Spark Ignition Engine Concepts – REF. NO. EPA-650/2–75–023
Evaluation of R&D Investment Alternatives for SOx Air Pollution Control Processes – REF. NO. EPA-650/2–74–098
Evaluation of Sulfur Dioxide Emission Control Options for Iowa Power Boilers – REF. NO. EPA-650/2–74–127
Evaluation of Tailings Ponds Sealants – REF. NO. EPA-660/2–74–065
Evaluation of Three Combined Sewage Overflow Treatment Alternatives — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–079
Evaluation of TGS-ANSA Procedure for Determination of Nitrogen Dioxide in Ambient Air – REF. NO. EPA-650/4–74–047
Excerpts from Control of Infiltration and Inflow into Sewer Systems and Prevention and Correction of Excessive Infiltration and Inflow Into Sewer Systems – REF. NO. EPA-670/9–74–004
Executive Summary of Three EPA Demonstration Programs in Erosion and Sediment Control – REF. NO. EPA-660/2–74–073
Experimental High Ash Papermill Sludge Landfill – First Annual Report — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–076a
Experimental High Ash Papermill Sludge Landfill – Second Annual Report — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–74–076b
Explicit Calibration of the Pills II System – REF. NO. EPA-660/2–73–011
Exploratory Study of Factors Affecting Aerosol Formation – REF. NO. EPA-650/3–75–002
Extended Aeration Sewage Treatment in Cold Climate — Abstracted 600/9–75–001a — REF. NO. EPA-660/2–74–070
EPA Alkali Scrubbing Test Facility: Limestone Wet Scrubbing Test Result – REF. NO. EPA-650/2–74–010
EPA Alkali Scrubbing Test Facility: Sodium Carbonate and Limestone Test Results – REF. NO. EPA-650/2–73–013
EPA Alkali Scrubbing Test Facility: Summary of Testing Through October 1974 – REF. NO. EPA-650/2–75–047
EPA Fine Particle Scrubber Symposium (San Diego, 5/28–30/74) – REF. NO. EPA-650/2–74–112
Fabric Boom Concept for Containment and Collection of Floating Oil – REF. NO. EPA-670/2–73–069
Fabric Filter Cleaning Studies – REF. NO. EPA-650/2–75–009
Fabrication and Installation of the Stationary Source Simulator – REF. NO. EPA-650/2–75–015
Fabrication of Monitoring System for Determining Mass and Composition of Aerosol as a Function of Time – REF. NO. EPA-650/2–75–048
Fabrication of Single Cell Protein From Cellulosic Wastes — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–032
Fate and Effects of Trace Elements in Sewage Sludge When Applied to Agricultural Lands: A Literature Review Study – REF.NO. EPA -670/2–74–005
Fate of Select Pesticides in the Aquatic Environment – REF. NO. EPA-660/3–74–025
Fate of Trace Constituents of Coal During Gasification – REF. NO. EPA-650/2–73–004
Feasibility of a CW Lidar Technique for Measurement of Plume Opacity – REF. NO. EPA-650/2–73–037
Feasibility of Emission Standards Based on Particle Size – REF. NO. EPA-600/5–74–007
Feasibility of Flux Force/Condensation Scrubbing for Fine Particulate Collection – REF. NO. EPA-650/2–73–036
Feasibility of Hydraulic Transport and Treatment of Ground Household Refuse Through Sewers – REF. NO. EPA-670/2–74–019
Feasibility of Hydraulic Transport of Ground Household Refuse Through Sewer Appurtenances – REF. NO. EPA-670/2–74–021
Feasibility of Metrac System for Regional Air Pollution Study – REF. NO. EPA-650/4–74–051
Feasibility of Overflow Overland Flow Treatment of Feedlot Runoff – REF. NO. EPA-660/2–74–062
Feasibility of Overland Flow for Treatment of Raw Domestic Wastewater – REF. NO. EPA-660/2–74–087
Feasibility of 5 gpm Dynactor/Flash Magnetic Separator System to Treat Spilled Hazardous Materials — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–004
Feasibility Study of a New Surface Mining Method "Longwall Stripping" – REF. NO. EPA-670/2–74–002
Feasibility Study of the Use of Resonance Scattering for the Remote Detection of S02 – REF. NO. EPA-650/2–74–020
Feasibility Study of Use of Molten Salt Technology for Pyrolysis of Solid Waste – REF. NO. EPA-670/2–75–014
Federal Aircraft Noise Research, Development, and Demonstration Programs: FY 73 – FY 75 – REF. NO. EPA-600/2–75–003
Federal Machinery Noise Research, Development and Demonstration: FY 73–75 – REF. NO. EPA-600/2–75–008
Federal Noise Effects Research: FY 73 – FY 75 — Abstracted 600/9–75–001a — REF. NO. EPA-600/1–75–001
Federal Surface Vehicle Noise Research, Development, and Demonstration Program: FY 73 – FY 75 — Abstracted 600/9–75–001a — REF. NO. EPA-600/2–75–002
Ferric Chloride and Organic Polyelectrolytes for the Removal of Phosphorus – REF. NO. EPA-670/2–73–103

# TITLE INDEX

Field Measurements of Particle Size Distribution Sizing Devices – REF. NO. EPA-650/2–73–035
Field Testing and Evaluation of Methods for Measuring Visibility – REF. NO. EPA-650/2–75–039
Field Testing: Application of Combustion Modifications to Control NOx Emissions for Utility Boilers – REF. NO. EPA-650/2–74–066
Field Testing: Application of Combustion Modifications to Control Pollutant Emissions from Industrial Boilers – Phase I – REF.NO. EPA -650/2–74–078a
Final Report Deep Water Pilot Plant Treatability Study – REF. NO. EPA-660/2–73–038
Financial Incentives and Pollution Control: A Case Study – REF. NO. EPA-600/5–75–007
Fine Particle Scrubber Performance Tests – REF. NO. EPA-650/2–74–093
First Annual Progress Report on a Study of Corrosion in Municipal Incinerators – REF. NO. EPA-670/2–73–032
First Annual Report: Routing of Solid Waste Collection Vehicles and Appendix B – Optimal Routing of Solid Waste Collection Vehicles — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–035b
First Annual Report: Routing of Solid Waste Collection Vehicles and Appendix A – A Linear Programming Approach for the Traveling Salesman Problem — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–035a
First Annual Reports of EPA Grants Funded for 1FYGL – REF. NO. EPA-660/3–73–021
Fisheries and Energy Production: A Symposium – REF. NO. EPA-600/3–75–001
Flame Characterization Probes – REF. NO. EPA-650/2–74–023
Flow Establishment and Initial Entrainment of Heated Water Surface Jets — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–014
Fluidized Bed Combustion Process Evaluation (Phase I – Residual Oil Gasification/Desulfurization Demonstration at Atmospheric Pressure) Volume I – Summary – REF. NO. EPA-650/2–75–027a
Fluidized Bed Combustion Process Evaluation (Phase I – Residual Oil Gasification/Desulfurization Demonstration at Atmospheric Pressure) Volume II – Appendices – REF. NO. EPA-650/2–75–027b
Fluorescence Immunoassay Technique for Detecting Organic Environmental Contaminants – REF. NO. EPA-650/1–75–004
Fluoride Emissions from Phosphoric Acid Plant Gypsum Ponds – REF. NO. EPA-650/2–74–095
Forecast of the Effects of Air and Water Controls of Solid Waste Generation — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–74–095b
Formation of Aerosols in a Photochemical Fast Row Reactor – REF. NO. EPA-650/3–75–004
Formation of Halogenated Organics By Chlorination of Water Supplies – REF. NO. EPA-600/1–75–002
Fortran Programs for Analyzing Collaborative Test Date: Part I – General Statistics — Abstracted 600/9–75–001a — REF.NO. EPA -670/4–75–004a
Fortran Programs for Analyzing Collaborative Test Date: Part II – Scatter Plots — Abstracted 600/9–75–001a — REF.NO. EPA -670/4–75–004b
Fuels Technology: A State-of-the-Art Review – REF. NO. EPA-650/2–75–034
Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume 1 – REF. NO. EPA-650/2–73–019a
Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume II – Appendices A through H – REF. NO. EPA-650/2–73–019b
Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume III – Appendices I through L – REF. NO. EPA-650/2–73–019c
Future Dredging Quantities in the Great Lakes — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–74–029
Gas Requirements to Pressurize Abandoned Deep Mines – REF. NO. EPA-670/2–73–054
Gasification of Fossil Fuels Under Oxidative, Reductive, and Pyrolytic Conditions – REF. NO. EPA-650/2–73–042
Granite Industry Wastewater Treatment – REF. NO. EPA-660/2–74–040
Great Lakes Water Quality — Status of Pertinent EPA Research — Abstracted 600/9–75–001a — REF. NO. EPA-660/9–74–002
Ground Water Contamination in the Northeast States – REF. NO. EPA-660/2–74–056
Ground Water Pollution Features of Federal and State Laws and Regulations – REF. NO. EPA-600/4–73–001a
Ground-Water Pollution Problems in the Northwestern United States – REF. NO. EPA-660/3–75–018
Guide for the Evaluation of Atmospheric Analyzers – REF. NO. EPA-650/4–74–014
Guide to Models in Governmental Planning and Operations – REF. NO. EPA-600/5–74–008
Guidelines for the Disposal of Small Quantities of Unused Pesticide – REF. NO. EPA-670/2–75–057
Guidelines for Determining Performance Characteristics of Altimated Methods for Measuring Nitrogen Dioxide and Hydrocarbons, Corrected for Methane in Ambient Air – REF. NO. EPA-650/4–74–018
Guidelines for Development of a Quality Assurance Program: Volume XII – Determination of Phosphorus in Gasoline – REF.NO. EPA -650/4–74–005L
Guidelines for Development of a Quality Assurance Program: Volume XIII – Test for Lead in Gasoline by Atomic Absorption Spectrometry – REF. NO. EPA-650/4–74–005m
Guidelines for Development of a Quality Assurance Program: Volume I-Determination of Stack Gas Velocity and Volumetric FlowRate (Type-S Pitot Tube) – REF. NO. EPA-650/4–74–005a
Guidelines for Development of a Quality Assurance Program: Volume II – Gas Analysis for Carbon Dioxide, Excess Air, and Dry Molecular Weight – REF. NO. EPA-650/4–74–005b
Guidelines for Development of a Quality Assurance Program: Volume III – Determination of Moisture in Stack Gases – REF.NO. EPA -650/4–74–005c
Guidelines for Development of a Quality Assurance Program: Volume IV – Determination of Particulate Emissions from Stationary Sources – REF. NO. EPA-650/4–74–005d
Guidelines for Development of a Quality Assurance Program: Volume VIII – Determination of CO Emissions from Stationary Sources by NDIR Spectrometry – REF. NO. EPA-650/4–74–005h
Handbook for Evaluating Water Bacteriology – REF. NO. EPA-670/9–75–006
Handbook of Radiochemical Analytical Methods — Abstracted 600/9–75–001a — REF. NO. EPA-680/4–75–001

# TITLE INDEX

Haze Formation: It's Nature and Origin – 1973 – REF. NO. EPA-650/3–74–002
Health and Annoyance Impact of Odor Pollution – REF. NO. EPA-650/1–75–001
Health Consequences of Sulfur Oxides: A Report from CHESS,1970–1971 – REF. NO. EPA-650/1–74–004
Heavy Metal Accumulation in Soil and Vegetation From Smelter Emissions – REF. NO. EPA-660/3–74–012
Herbicide Runoff from Four Coastal Plain Soil Types – REF. NO. EPA-660/2–74–017
High-Temperature Vortex Incinerator — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–025
Highway Air Pollution Measurement Program Using Sulfur Hexafluoride Tracer Gas – REF. NO. EPA-650/4–74–043
Hospital Solid Waste Disposal in Community Facilities – REF. NO. EPA-670/2–73–048
Hospital Solid Waste: An Annotated Bibliography – REF. NO. EPA-670/5–74–001
Hydrogen Peroxide Cures Filamentous Growth in Activated Sludge – REF. NO. EPA-670/2–73–033
Hypochlorination of Pollution Stormwater Pumpage at New Orleans – REF. NO. EPA-670/2–73–067
Hypolimnetic Flow Regimes in Lakes and Impoundments – REF. NO. EPA-660/2–74–053
Hypolimnion Aeration With Commercial Oxygen – Volume I – Dynamics of Bubble Plume – REF. NO. EPA-660/2–73–025a
Hypolimnion Aeration With Commercial Oxygen – Volume II – Bubble Plume Gas Transfer – REF. NO. EPA-660/2–73–025b
Identification and Assessment of Asbestos Emissions from Incidental Sources of Asbestos – REF. NO. EPA-650/2–74–087
Identification and Characterization of the Use of Mixed Conventional and Waste Fuels – REF. NO. EPA-650/2–75–017
Impact of the Use of Microorganisms on the Aquatic Environment — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–001
Impact of Hydrologic Modifications on Water Quality – REF. NO. EPA-600/2–75–007a
Implementation of a Computer Based Information System for Mass Spectral Identification – REF. NO. EPA-660/2–74–048
Improved Air Pollution Control for a Kraft Recovery Boiler: Recovery Boiler No. 4 – REF. NO. EPA-650/2–74–071b
Improved Air Pollution Control for Kraft Recovery Boiler: Modified Recovery Boiler No. 3 – REF. NO. EPA-650/2–74–071a
Improvement of Instrumentation and Methodology for Collection and Analysis of Mercury – REF. NO. EPA-650/2–75–028
Improvement of Treatment of Food Industry Waste – REF. NO. EPA-660/2–74–035
In-Stack Transmissometer Evaluation and Application to Particulate Opacity Measurement – REF. NO. EPA-650/2–75–008
In-Stack Transmissometer Measurement of Particulate Opacity and Mass Concentration – REF. NO. EPA-650/2–74–120
Incineration of Bulky Refuse Without Prior Shredding – REF. NO. EPA-670/2–73–023
Incineration of Plastics Found in Municipal Wastes – REF. NO. EPA-670/2–73–087
Indexed Bibliography of Office of Research and Development Reports – Updated to January 1975 — Abstracted 600/9–75–001a — REF. NO. EPA-600/9–74–002
Indexed Bibliography of Office of Research and Development Reports – REF. NO. EPA-600/9–74–001
Indigester Black Liquor Oxidation for Odor Control in Kraft Pulping – REF. NO. EPA-650/2–74–005
Industrial Chemicals Solid Waste Generation — The Significance of Process Resource Recovery, and Improved Disposal – REF.NO. EPA -670/2–74–078
Industrial Solid Waste Classification Systems — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–024
Industrial Water Softener Waste Brine Reclamation – REF. NO. EPA-660/2–74–007
Influence of Fiber Characteristics on Particulate Filtration – REF. NO. EPA-650/2–75–002
Influence of Fly Ash Compositional Factors on Electrical Volume Resistivity – REF. NO. EPA-650/2–74–074
Influences of Wastewater Management on Land Use: Tahoe Basin 1950–1972 – REF. NO. EPA-600/5–74–019
Information Resource: Final Report Water Pollution Control in Water Utilities – REF. NO. EPA-660/2–73–020
Infrared Dry Caustic vs. Wet Caustic Peeling of White Potatoes – REF. NO. EPA-660/2–74–088
Infrared Fourier Transform Spectrometry of Gas Chromatography Effluents – REF. NO. EPA-660/2–73–034
Infrared Gas Filter Correlation Instrument for In-Situ Measurement of Gaseous Pollutants – REF. NO. EPA-650/2–74–094
Infrared Sensor for the Remote Monitoring of SO$B2$A – REF. NO. EPA-650/2–75–041
Infrared Spectral Sensor for Refuse Sorting – REF. NO. EPA-670/2–74–031
Instream Aeration to Control Dissolved Sulfide in Sanitary Sewers – REF. NO. EPA-670/2–73–024
Instrument for Simultaneous Monitoring NOx and SO2 in Stationary Sources – REF. NO. EPA-650/2–73–027
Instrument to Monitor CH4, CO and CO2 in Auto Exhaust – REF. NO. EPA-650/2–73–030
Instrumental Analyses for Wet Scrubbing Processes – REF. NO. EPA-650/2–74–064
Instrumentation and Methodology for the Assay of Polynuclear Aromatic Hydrocarbons – REF. NO. EPA-650/2–74–069
Integrated Multi-media Pollution Model – REF. NO. EPA-600/5–74–020
Interactions of Stack Gas Sulfur and Nitrogen Oxides on Dry Berkau – REF. NO. EPA-650/2–73–029
Interactions of Various Air Pollutants on Causation of Pulmonary Disease – REF. NO. EPA-650/1–73–002
Interfacing a 24-Point Analog Recorder to a Computer Controlled Telemetry Line — Abstracted 600/9–75–001a — REF.NO. EPA -670/4–75–002
Interferometric Instrumentation For Particle Size Analysis – REF. NO. EPA-650/2–73–034
Interim Report of Task Force on Phosphate Removal Sludges — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–013
Intermedia Aspects of Air and Water Pollution Control – REF. NO. EPA-600/5–73–003
Interpretative Compilation of EPA Studies Related to Coal Quality and Cleanability – REF. NO. EPA-650/2–74–030
Invariant Modeling of Turbulence and Diffusion in the Planetary Boundary Layer – REF. NO. EPA-650/4–74–035
Investigation of the Effects of Carbon Monoxide on Humans in the Driving Task – REF. NO. EPA-650/1–73–003
Investigation of the Orion Research Cyanide Monitor – REF. NO. EPA-670/4–75–005
Investigation of Corrosion Deposition Phenomena on Gas Turbine Blades – REF. NO. EPA-670/2–73–006
Investigation of Extractive Sampling Interface Parameters – REF. NO. EPA-650/2–74–089
Investigation of Particulate Emission from Oil-Fired Residential Heating Units – REF. NO. EPA-650/2–74–026

# TITLE INDEX

**Investigation of Particulate Matter Monitoring Using Contact Electrification – REF. NO. EPA-650/2–75–043**
**Investigation of Remote Sensing Techniques for Agricultural Feedlot Pollution Detection – REF. NO. EPA-670/4–73–002**
**Investigation of Surface Combustion Concepts for NOx Control in Utility Boilers and Stationary Gas Turbines – REF.NO.** EPA -650/2–73–014
**Investigation of Surface Films – Chesapeake Bay Entrance – REF. NO. EPA-670/2–73–099**
**Ion Exchange Process for Recovery of Chromate from Pigment Manufacturing – REF. NO. EPA-670/2–74–044**
**Ion-Selective Membranes Electrodes for Water Pollution Water Monitoring – REF. NO. EPA-660/2–74–079**
**Iron Foundry Cupola Recuperative Emission Control Demonstration — Design Manual – REF. NO. EPA-650/2–74–004**
**Isolation of Hayfever Antigens from Short Ragweed Pollen – REF. NO. EPA-650/2–74–044**
**Joint Construction Sediment Control Project – REF. NO. EPA-660/2–73–035**
**Kinetic Mechanisms of Methane/Air Combustion with Pollutant Formation – REF. NO. EPA-650/2–74–045**
**Kinetic Mechanisms Governing the Fate of Chemically Bound Sulfur and Nitrogen in Combustion – REF. NO. EPA-650/2–74–017**
**Laboratory and Field Evaluations of EPA Methods 2, 6 and 7 – REF. NO. EPA-650/4–74–039**
**Laboratory and Numerical Simulation of Plume Dispersion in Stably Stratified Flow Over Complex Terrain – REF. NO. EPA-650/4–74–044**
**Laboratory Analyses of Atmospheric Hydrocarbon – California South Coast Air Basin (Los Angeles Air Quality Control Region) August – November 1973 – REF. NO. EPA-650/4–74–052**
**Laboratory Ozonation of Municipal Wastewater – REF. NO. EPA-670/2–73–075**
**Laboratory Study of Continous Electro-oxidation of Dilute Cuanide Waste – REF. NO. EPA-670/2–74–059**
**Laboratory Study of Self-Sealing Limestone Plugs for Mine Openings – REF. NO. EPA-670/2–73–081**
**Land Application of Sludge Effluent and Sludges: Selected Abstracts – REF. NO. EPA-660/2–74–042**
**Land Use and the Environment: An Anthology of Readings – REF. NO. EPA-600/5–75–009**
**Land Use Decision Methodology for Environmental Control – REF. NO. EPA-600/5–75–008**
**Land Use Forms and the Environment – An Executive Summary — Abstracted 600/9–75–001a — REF. NO. EPA-600/5–75–003**
**Lead: Environmental Sources and Red Cell Toxicity in Urban Children – REF. NO. EPA-650/1–75–003**
**Lidar Studies of Stack Plumes in Rural and Urban Environments – REF. NO. EPA-650/4–73–002**
**Lime Disinfection of Sewage Bacteria at Low Temperature – REF. NO. EPA-660/2–73–017**
**Lime Stabilized Sludge: Its Stability and Effect on Agricultural Land — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–012**
**Lime/Limestone Scrubbing in a Pilot Dustraxtor – Key West – REF. NO. EPA-650/2–74–077**
**Limestone and Limestone-Lime Neutralization of Acid Mine Drainage – REF. NO. EPA-670/2–74–051**
**Limited $SO_2$ and NOX Measurements in St. Louis, 1974: Volume I – Plume Tracking by Correlation Spectroscopy – REF.NO.** EPA -650/2–75–005a
**Limited SO$B2$A and NO$BX$A Measurements in St. Louis, 1974: Volume II, Longline Ambient SO$B2$A Monitor and Variability of SO$B2$A and NO$BX$A – REF. NO. EPA-650/2–75–005b**
**Limnological Studies of Flat-head, Montana: A Status Report – REF. NO. EPA-660/3–74–023**
**Liquid Aerobic Composting of Cattle Wastes and Evaluation of Byproducts – REF. NO. EPA-660/2–74–034**
**Literature Search and Analysis of Information Regarding Sources, Uses, Production, Consumption, Reported Medical Cases and Toxicology of Platinum and Palladium – REF. NO. EPA-650/1–74–008**
**Literature Survey of Instrumental Measurements of Biochemical Oxygen Demand for Control Application, 1960–1963 – REF.NO.** EPA -670/4–74–001
**Livestock and the Environment – A Bibliography with Abstracts – REF. NO. EPA-660/2–74–024**
**Livestock and the Environment—A Bibliography with Abstracts, Volume II — Abstracted 600/9–75–001a — REF.NO.** EPA -660/2–75–003
**Lone Star Steel Steam-Hydro Air Cleaning System Evaluation – REF. NO. EPA-650/2–74–028**
**Losses of Fertilizers and Pesticides from Claypan Soils – REF. NO. EPA-660/2–74–068**
**Low Winter Dissolved Oxygen in Some Alaskan Rivers – REF. NO. EPA-660/3–74–008**
**Management Practices Affecting Quality and Quantity of Irrigation Return Flow — Abstracted 600/9–75–001a — REF.NO.** EPA -660/2–75–005
**Managing the Environment – REF. NO. EPA-600/5–73–010**
**Manual for Deicer Chemical Application Practices – REF. NO. EPA-670/2–74–045**
**Manual for Deicing Chemical Storage and Handling – REF. NO. EPA-670/2–74–033**
**Manual Methods for Sampling and Analysis of Particulate Emissions From Municipal Incinerators – REF. NO. EPA-650/2–73–023**
**Marine Algal Assay Procedure Bottle Test — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–008**
**Marketing $H_2 SO_4$ from $SO_2$ Abatement Sources— The TVA Hypothesis – REF. NO. EPA-650/2–73–051**
**Mathematical Analysis of the Kinetics of Viral Inactivation – REF. NO. EPA-670/2–74–067**
**Mathematical Model for Aerobic Digestion – REF. NO. EPA-670/2–73–045**
**Mathematical Model for Barged Ocean Disposal of Wastes – REF. NO. EPA-660/2–73–029**
**Mathematical Model for Post Aeration – REF. NO. EPA-670/2–73–044**
**Mathematical Model of Electrostatic Precipitation – REF. NO. EPA-650/2–75–037**
**Mathematical Modeling of Phytoplankton in Lake Ontario — Abstracted 600/9–75–001a - – REF. NO. EPA-660/3–75–005**
**Mathematical Simulation of an Adsorber for Pollutant Removal – REF. NO. EPA-650/2–74–110**
**Mathematical Simulation of Atmospheric Photochemical Reactions: Model Development, Validation, and Application – REF.NO.** EPA -650/4–74–011
**Mathematical Simulation of Smog Chamber Photo-Chemical Experiments – REF. NO. EPA-650/4–74–040**
**Measurement and Characterization of Particles in Wet Scrubbing Process for SOx Control – REF. NO. EPA-650/2–73–024**

# TITLE INDEX

Measurement of the Opacity and Mass Concentration of Particulate Emissions by Transmissometry – REF. NO. EPA-650/2-74-128
Measurement of Entrained Liquid Levels in Effluent Gases from Scrubber Demisters – REF. NO. EPA-650/2-74-050
Measurement of Residual Chlorine Levels in Cooling Water — Amperometric Method – REF. NO. EPA-660/2-73-039
Measurement of Sulfur Dioxide, Particulate, and Trace Elements in Copper Smelter Converter and Roaster/Reverberatory Gas Streams – REF. NO. EPA-650/2-74-111
Measures of Effectiveness for Refuse Storage, Collection, and Transportation Practices – REF. NO. EPA-670/2-74-082
Measuring External Effects of Solid Waste Management – REF. NO. EPA-600/5-75-010
Mercury in the Aquatic Systems: Metholation, OxidationReduction; in Bio Accumulation – REF. NO. EPA-660/3-74-021
Mercury in the Environment – REF. NO. EPA-660/2-73-008
Mercury Recovery from Contaminated Waste Waters and Sludges – REF. NO. EPA-660/2-74-086
Mesoscale Windfield Analysis of Los Angeles Basin – REF. NO. EPA-650/4-73-001
Metabolism of Carbamate Insecticides – REF. NO. EPA-650/1-74-002
Metallic Recovery From Waste Waters Utilizing Cementation – REF. NO. EPA-670/2-74-008
Metallurgical Upgrading of Automotive Scrap Steel – REF. NO. EPA-670/2-73-091
Meteorological Episodes of Slowest Dilution in Contiguous United States – REF. NO. EPA-650/4-74-002
Methodology for Assignment of a Hydrocarbon Photochemical Reactivity Index for Emissions From Mobile Sources – REF.NO. EPA -650/2-75-025
Methodology for Treating Large Localized Emissions of Reactive Pollutants – REF. NO. EPA-650/4-74-006
Methods for Acute Toxicity Tests with Fish, Macroinvertebrates, and Amphibians –– Abstracted 600/9-75-001a — REF.NO. EPA -660/3-75-009
Methods for Improvement of Trickling Filter Plant Performance, Part I – Mechanical and Biological Optima – REF.NO. EPA -670/2-73-047a
Methods for Rapid and Accurate Measurement of Nitrate and Sulfate in Atmospheric Particulates – REF. NO. EPA-650/2-73-050
Methods to Treat, Control and Monitor Spilled Hazardous Materials – REF. NO. EPA-670/2-75-042
Microbial Degradation and Accumulation of Pesticides in Aquatic Systems – REF. NO. EPA-660/3-75-007
Microbiological Production of Geosmin – REF. NO. EPA-670/2-74-094
Microbiology of Sewage Sludge Disposal in Soil – REF. NO. EPA-670/2-74-074
Microstraining and Disinfection of Combined Sewer Overflows – Phase III – REF. NO. EPA-670/2-74-049
Mine Drainage Pollution Control Demonstration Grant Procedures and Requirement — Abstracted 600/9-75-001a — REF.NO. EPA -670/2-74-003
Mine Spoil Potentials for Soil and Water Quality – REF. NO. EPA-670/2-74-070
Minimum Standards For Quality of Life – REF. NO. EPA-600/5-75-012
Modal Cities – REF. NO. EPA-600/5-74-027
Model for Optimal Design and Operation of Solid Waste Transfer Stations – REF. NO. EPA-670/5-74-009
Model Verification – Aircraft Emissions Impact on Air Quality – REF. NO. EPA-650/4-74-049
Modeling Dynamics of Biological and Chemical Components of Aquatic Ecosystems — Abstracted 600/9-75-001a — REF.NO. EPA -660/3-75-012
Modifications to the Executive Computer Program for Steady-State Simulation of Wastewater Treatment Facilities – REF.NO. EPA -670/2-74-066
Modular Wastewater Treatment System Demonstration For the Textile Maintenance Industry – REF. NO. EPA-660/2-73-037
Molecular Modulation Spectrometry for Observation of Free Radicals – REF. NO. EPA-650/4-74-004
Multi-Purpose Combined Sewer Overflow Treatment Facility, Mount Clemens, Michigan – REF. NO. EPA-670/2-75-010
Multielement Analyses of Environmental Samples by Spark Source Mass Spectrometry – REF. NO. EPA-660/2-74-001
Municipal Waste Disposal by Shipborne Incineration and Sea-Disposal of Residues – REF. NO. EPA-670/2-73-017
Municipal Water Pollution Control Abstracts for 1974 – REF. NO. EPA-600/2-75-005
Negatively Buoyant Jets in a Cross Flow – REF. NO. EPA-660/2-73-012
New Membranes for Reverse Osmosis Treatment of Metal Finishing Effluents – REF. NO. EPA-660/2-73-033
New Microbial Indicators of Wastewater Chlorination Efficiency – REF. NO. EPA-670/2-73-082
News of Environmental Research in Cincinnati – May-December, 1973 – REF. NO. EPA-670/9-74-002
News of Environmental Research in Cincinnati, January – December 1974 — Abstracted 600/9-75-001a — REF. NO. EPA-670/9-75-003
Nitrate and Nitrite Volatilization By Microorganisms in Laboratory Experiments – REF. NO. EPA-660/2-73-002
Nitrite-Accelerated Photochemical Degradation of Cellulose as a Pretreatment for Microbiological Conversion to Protein – REF.NO. EPA -670/2-73-052
Nitrogen and Phosphorus Losses from Agronomy Plots in North Alabama – REF. NO. EPA-660/2-74-033
Nitrogen Removal By Ammonia Stripping – REF. NO. EPA-670/2-73-040
Nitrogen Sources and Cycling in Natural Waters – REF. NO. EPA-660/3-73-002
Nitrogeneous Compounds in the Environment – REF. NO. EPA-SAB-73-001
Nomographs for Thermal Pollution Control Systems – REF. NO. EPA-660/2-73-004
Normal Carboxyhemoglobin Levels of Blood Donors in the United States – REF. NO. EPA-650/1-73-004
North Fork Alluvial Decontamination Project, Hubbard Creek Reservoir Watershed – REF. NO. EPA-660/2-74-019
Nutrient Inactivation As A Lake Restoration Procedure — I. Laboratory Investigations – REF. NO. EPA-660/3-74-032
NERC-Cincinnati Annual Report, 1974 – REF. NO. EPA-670/9-75-002
NO2 Actinometer for Field Use – REF. NO. EPA-650/4-74-036
NO2 Measuring System – REF. NO. EPA-650/2-74-059

# TITLE INDEX

NTA and Mercury in Artificial Stream Systems – REF. NO. EPA-660/3–73–025
Occupational and Environmental Pesticide Exposure Study in South Florida – REF. NO. EPA-650/1–75–002
Occurrence and Distribution of Potentially Volatile Trace Elements in Coal – REF. NO. EPA-650/2–74–054
Occurrence of Organohalides in Chlorinated Drinking Waters – REF. NO. EPA-670/4–74–008
Odor Removal from Air by Adsorption on Charcoal – REF. NO. EPA-650/2–74–084
Odors from Confined Livestock Production – A State of the Art – REF. NO. EPA-660/2–74–023
Odors Emitted From Raw and Digested Sewage Sludge – REF. NO. EPA-670/2–73–098
Off-the-Shelf Analyzers for Measuring Adenosine Triphosphate (ATP) in Activated Sludge – REF. NO. EPA-670/2–74–034
Oil Recovery System Using Sorbent Material – REF. NO. EPA-670/2–73–068
Oil Recovery System Utilizing Polyurethane Foam—A Feasibility Study – REF. NO. EPA-670/2–73–084
Oil Shale Air Pollution Control – REF. NO. EPA-600/2–75–009
Oil Spill and Oil Pollution Reports — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–003
Oil Spill and Oil Pollution Reports – November 1974 – February 1975 – REF. NO. EPA-670/2–75–044
Oil Spill and Oil Pollution Reports, February 1975 – April 1975 – REF. NO. EPA-670/2–75–059
On-Line Colorimetric Analyzers for Monitoring Nitrate-Nitrite, Ammonia, Orthophosphorus and Total Hydrolyzable Phosphorusin Wastewater-Treatment Process Streams – REF. NO. EPA-670/2–74–046
On-Shore Treatment Systems for Sewerage from Watercraft Retention Systems — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–75–007
Optical Measurements of Smoke Particle Size Generated by Electric Arcs – REF. NO. EPA-650/2–74–034
Optimal Configuration of a Regional Solid Waste Management System – REF. NO. EPA-670/5–74–007
Optimization and Design of an Oil/Activated Sludge Concentration Process – REF. NO. EPA-670/2–74–004
Optimization of Air Pollution Measurement Locations – REF. NO. EPA-650/4–75–005
Optimization Models for Regional Public Systems – REF. NO. EPA-670/5–74–008
Organic Compounds Entering Groundwater from a Landfill – REF. NO. EPA-660/2–74–077
Organic Nutrient Factors Effecting Algal Growths – REF. NO. EPA-660/3–73–003
Outpatient Medical Costs Related to Air Pollution in the Portland, Oregon Area – REF. NO. EPA-600/5–74–017
Oxidation of Organic Matter in Sediments – REF. NO. EPA-660/3–73–005
Oxygenation of Aqueous Bodies Using Liquid Oxygen-Loxination – REF. NO. EPA-670/2–74–048
OR&D ADP Workshop Proceedings No. 1 – REF. NO. EPA-600/9–75–002
OR&D Publications Summary – March 1975 – REF. NO. EPA-600/9–75–001a
Particulate Collection Efficiency Measurements on a Wet Electrostatic Precipitator – REF. NO. EPA-650/2–75–033
Particulate Collection Study, EPA/TVA Full-Scale Dry Limestone Injection Tests – REF. NO. EPA-650/2–74–053
Particulate Emissions from Alfalfa Dehydrating Plants — Control Costs and Effectiveness – REF. NO. EPA-650/2–74–007
Particulate Sizing Techniques for Control Device Evaluation – REF. NO. EPA-650/2–74–102
Paunch Manure as a Feed Supplement in Channel Catfish Farming – REF. NO. EPA-660/2–74–046
Pentapure Impinger Evaluation – REF. NO. EPA-650/2–75–024a
Performance of the OSCO Model 1391 Water Wastewater Sampler — Abstracted 600/9–75–001a — REF. NO. EPA-670/4–75–001
Performance of the Union Carbide Dissolved Oxygen Sensor – REF. NO. EPA-670/4–73–018
Performance Controls for Sensitive Lands: A Practical Guide For Local Administrators – REF. NO. EPA-600/5–75–005
Performance Specifications for Stationary-Source Monitoring Systems for Gases and Visible Emissions – REF. NO. EPA-650/2–74–013
Pesticide Movement from Crop Lands into Lake Erie – REF. NO. EPA-660/2–74–032
Pesticide, Transport and Runoff Model for Agricultural Land – REF. NO. EPA-660/2–74–013
Pesticides in the Illinois Waters of Lake Michigan – REF. NO. EPA-660/3–74–002
Pesticides Epidemiological Field Studies – REF. NO. EPA-650/1–74–009
Petrograhpic Characteristics and Physical Properties of Marls, Chalks, Shells and Their Calcines Related to Desulfurization of Flue Gases – REF. NO. EPA-650/2–73–044
Petroleum Weathering: Some Pathways, Fate and Disposition on Marine Waters – REF. NO. EPA-660/3–73–013
Pharmacokinetics of Toxic Elements in Rainbow Trout – REF. NO. EPA-660/3–74–027
Phosphate Removal in an Activated Sludge Facility – REF. NO. EPA-670/2–74–061
Phosphorus Uptake and Release by Lake Ontario Sediments — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–006
Physical – Chemical Treatment of Raw Material Wastewater – REF. NO. EPA-670/2–73–070
Physical and Settling Characteristics of Particulates in Storm and Sanitary Wastewaters – REF. NO. EPA-670/2–75–011
Physical-Chemical Treatment of Municipal Wastes by Recycled Magnesium Carbonate – REF. NO. EPA-660/2–74–055
Physical, Chemical and Microbiological Methods of Solid Waste Testing – REF. NO. EPA-670/2–73–001
Physical, Chemical and Microbiological Methods of Solid Waste Testing: Four Additional Procedures – REF. NO. EPA-670/2–74–007
Phytoplankton Composition and Abundance in Lake Ontario During IFYGL — Abstracted 600/9–75–001a — REF.NO. EPA -660/3–75–004
Pilot – Demonstration Project for Industrial Reuse of Renovated Municipal Wastewater – REF. NO. EPA-670/2–73–064
Pilot Plant Optimization of Phosphoric Acid Recovery Process – REF. NO. EPA-670/2–75–015
Pilot Scale Treatment of Wine Stillage — Abstracted 600/9–75–001a — REF. NO. EPA-660/2–75–002
Pilot-Plant Study of an Ammonia Absorption Ammonium Bisulfate Regeneration Process, Topical Report Phases I and II – REF.NO. EPA -650/2–74–049a
Planned Maintenance Management System for Municipal Wastewater Treatment Plants – REF. NO. EPA-600/2–73–004
Plant Scale Studies of the Magnesium Carbonate Water Treatment Process – REF. NO. EPA-660/2–75–006

# TITLE INDEX

Plume Temperature Measurements of Shallow Submerged Model Discharges With Current – REF. NO. EPA-660/2-73-001
Pneumo-Slurry Pipeline Collection and Removal of Municipal Solid Waste – REF. NO. EPA-670/2-73-072
Pollutant Analysis Cost Survey – REF. NO. EPA-650/2-74-125
Polluted Groundwater: A Review of the Significant Literature – REF. NO. EPA-600/4-74-001
Polluted Groundwater: Estimating the Effects of Man's Activities (Formerly 600/4-74-002) – REF. NO. EPA-680/4-74-002
Polluted Groundwater: Some Causes, Effects, Controls and Monitoring – REF. NO. EPA-600/4-73-001b
Pollution Aspects of Catfish Production—Review and Projections – REF. NO. EPA-660/2-74-064
Pollution Control Technology for Pesticide Formulators and Packagers — Abstracted 600/9-75-001a — REF. NO. EPA-660/2-74-094
Pollution Control Technology Assessment – Proceedings of an Environmental Resources Conference, May 1-3, 1974 — Abstracted 600/9-75-001a — REF. NO. EPA-670/9-74-006
Pollution Effects on Adult Steelhead Migration in the Snake River – REF. NO. EPA-660/3-73-017
Pollution Problems and Research Needs for an Oil Shale Industry – REF. NO. EPA-660/2-74-067
Portable Device for Measuring Wastewater Flow in Sewers – REF. NO. EPA-600/2-73-002
Potentially Hazardous Emissions From The Extraction and Processing of Coal and Oil – REF. NO. EPA-650/2-75-038
Poultry Manure Disposal by Plow-Furrow-Cover – REF. NO. EPA-670/2-73-085
Poultry Processing Wastewater Treatment and Reuses – REF. NO. EPA-660/2-74-060
Precipitation Scavenging of Inorganic Pollutants from Metropolitan Sources – REF. NO. EPA-650/3-74-005
Prediction of Sub-soil Erodibility Using Chemical, Mineralogical and Physical Parameters – REF. NO. EPA-660/2-74-043
Preliminary Assessment of Wet Systems for Residential Refuse Collection – REF. NO. EPA-670/2-74-065
Preliminary Design of a Comprehensive Waste Oil Processing Facility – REF. NO. EPA-670/2-75-056
Preliminary Design of a Household Refuse Grinder – REF. NO. EPA-670/2-74-020
Preparation and Evaluation of Activated Carbon Produced from Municipal Refuse – REF. NO. EPA-670/2-73-010
Preventing Landfill Leachate Contamination of Water – REF. NO. EPA-670/2-73-021
Pricing for Water Supply: Its Impact on Systems Management – REF. NO. EPA-670/1-74-001
Problems and Opportunities in Management of Combustible Solid Wastes – REF. NO. EPA-670/2-73-056
Procedures for Measurement in Stratified Gases – Volume I – REF. NO. EPA-650/2-74-086a
Procedures for Measurement in Stratified Gases – Volume II, Appendices – REF. NO. EPA-650/2-74-086b
Proceeding, Coal Combustion Seminar, June 19-20, 1973 – REF. NO. EPA-650/2-73-021
Proceedings of the Solvent Reactivity Conference – REF. NO. EPA-650/3-74-010
Proceedings of Seminar on Methodology for Monitoring the Marine Environment – REF. NO. EPA-600/4-74-004
Proceedings of Symposium on Statistical Aspects of Air Quality – REF. NO. EPA-650/4-74-038
Proceedings of Third International Conference on Fluidized-Bed Combustion – REF. NO. EPA-650/2-73-053
Proceedings Fourth National Symposium on Food Processing Wastes – REF. NO. EPA-660/2-73-031
Proceedings, Symposium Control of Fine-Particulate Emissions from Industrial Sources, January 15-18, 1974 San Francisco, CA – REF. NO. EPA-600/2-74-008
Proceedings: Fifth National Symposium on Food Processing Wastes – REF. NO. EPA-660/2-74-058
Proceedings: Flue Gas Desulfurization Symposium 1973 – REF. NO. EPA-650/2-73-038
Proceedings: Symposium on the Use of Fabric Filters for the Control of Submicron Particulates (April 8-10, 1974, Boston, Ma.) – REF.NO. EPA -650/2-74-043
Proceedings: Symposium on Flue Gas Desulfurization – Atlanta, November 1974, Volume II – REF. NO. EPA-650/2-74-126b
Process and Environmental Technology for Producing SNG and Liquid Fuels – REF. NO. EPA-660/2-75-011
Process Modifications for Control of Particulate Emissions from Stationary Combustion, Incineration, and Metals – REF.NO. EPA -650/2-74-100
Production of Clean Fuel Gas From Bituminous Coal – REF. NO. EPA-650/2-73-049
Production of Low-Sulfur Gasoline – REF. NO. EPA-650/2-74-130
Program for Reduction of NOx from Tangential Coal-Fired Boilers – Phase 1 – REF. NO. EPA-650/2-73-005
Programmed Demonstration for Erosion and Sediment Control Specialist – REF. NO. EPA-660/2-74-071
Progress in Instrumentation and Techniques for Measurement of Air Pollutants – REF. NO. EPA-650/2-74-015
Projects in the Industrial Pollution Control Division – December 1974 — Abstracted 600/9-75-001a — REF. NO. EPA-600/2-75-001
Promising Technologies for Treating Hazardous Waste – REF. NO. EPA-670/2-74-088
Promoting Environmental Quality Through Urban Planning and Control – REF. NO. EPA-600/5-73-015
Properties of Ammonium Sulfate, Ammonium, and Sulfur Dioxide Solutions in Ammonia Scrubbing Processes – REF.NO. EPA -650/2-73-012
Protein Production from Acid Whey VIA Fermentation – REF. NO. EPA-660/2-74-025
Protocol for Evaluating the Nitrogen Status of Lake Sediments – REF. NO. EPA-660/3-73-024
Public Attitudes Toward Hazardous Waste Disposal Facilities – REF. NO. EPA-670/2-73-086
Puget Sound Oceanographic Field Studies Data Report, Everett, BELLINGHAM, Port Angeles, 1962-63 – REF. NO. EPA-660/3-73-014
Pyrolysis of Solid Municipal Wastes – REF. NO. EPA-670/2-73-039
Quality of Life Concept – A Potential New Tool For DecisionMakers – REF. NO. EPA-600/5-75-011
Quantification of Pollution in Agricultural Runoff – REF. NO. EPA-660/2-74-005
Quantitative Analysis of Airborne Asbestos by X-Ray Diffraction: Final Report on Feasibility Study – REF. NO. EPA-650/2-75-004
Radioactivity Standards Distribution Program – 1975 – REF. NO. EPA-680/4-75-002a
Radioactivity Standards Distribution Program, 1973 – 1974 – REF. NO. EPA-680/4-73-001A
Radiolytic Hydrolysis of Cellulose – REF. NO. EPA-670/2-73-030

# TITLE INDEX

**Rainfall-Runoff Relations on Urban and Rural Areas – REF. NO. EPA-670/2-75-046**

**Rationale and Methodology for Monitoring Groundwater Polluted by Mining Activities (Formerly 600/4-74-003) – REF.NO.** EPA -680/4-74-003

**Raw Materials Transportation Costs and Their Influence on the Use of Wastepaper and Scrap Iron and Steel, Volume I – Technical Discussion – REF. NO. EPA-670/2-74-024A**

**Raw Materials Transportation Costs and Their Influence on the Use of Wastepaper and Scrap Iron and Steel, Volume II – Appendices – REF. NO. EPA-670/2-74-024B**

**Reactivity of Polynuclear Aromatic Hydrocarbons with O2 and NO in the Presence of Light – REF. NO. EPA-650/1-74-010**

**Recirculating Waste System for Swine Units – REF. NO. EPA-670/2-73-025**

**Reclamation of Energy from Organic Waste – REF. NO. EPA-670/2-74-016**

**Reclamation of Metal Values from Metal-Finishing Waste Treatment Sludges – REF. NO. EPA-670/2-75-018**

**Reclamation of Sulfuric Acid From Waste Streams – REF. NO. EPA-670/2-75-016**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume I – Summary Report – REF. NO. EPA-670/2-73-053A**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume II – Toxicologic Summary – REF. NO. EPA-670/2-73-053B**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume III – Disposal Process Discriptions: Ultimate Disposal Incineration, and Pyrolysis Processes – REF. NO. EPA-670/2-73-053C**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volum IV – Disposal Process Descriptions: Biological and Miscellaneous Waste Treatment Processes – REF. NO. EPA-670/2-73-053D**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume V – National Disposal Site Candidate Waste Stream Constituent Profile Reports – Pesticides and Cyanide Compounds – REF. NO. EPA-670/2-73-053E**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VI – National Disposal Site Candidate Waste Stream Constituent Profile Report – Mercury, Arsenic, Chromium and Cadmium Compounds – REF.NO.** EPA -670/2-73-053F

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VII – National Disposal Site Candidate Waste Stream Constituent Profile Report – Propellants, Explosives, and Chemical Warfare Materiel – REF.NO.** EPA -670/2-73-053G

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VIII – National Disposal Site Candidate Waste Stream Constituent Profile Report – Miscellaneous Inorganic and Organic Compounds – REF.NO.** EPA -670/2-73-053H

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume IX – National Disposal Site Candidate Waste Stream Constituent Profile Report – Radioactive Materials – REF. NO. EPA-670/2-73-053I**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume X – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Organic Compounds – REF. NO. EPA-670/2-73-053J**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XI – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Organic Compounds – REF. NO. EPA-670/2-73-053K**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XII – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Inorganic Compounds – REF. NO. EPA-670/2-73-053L**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XIII – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Inorganic Compounds – REF. NO. EPA-670/2-73-053M**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XIV – Summary of Waste Origins, Forms and Quantities – REF. NO. EPA-670/2-73-053N**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XV – Research and Development Plans – REF. NO. EPA-670/2-73-053O**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XVI – References – REF.NO. EPA -670/2-73-053P**

**Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume I thru Volume XVI – REF.NO. EPA -670/2-73-053A-P**

**Recovery of Fatty Materials From Edible Oil Refinery Effluents – REF. NO. EPA-660/2-73-015**

**Reduction of Atmospheric Pollution by the Application of Fluidized-Bed Combustion – REF. NO. EPA-650/2-74-057**

**Reduction of Atmospheric Pollution by the Application of Fluidized-Bed Combustion and Regeneration of Sulfur-Containing Additives – REF. NO. EPA-650/2-74-104**

**Refinery Catalytic Cracker Reginerator SOx Control Process Survey – REF. NO. EPA-650/2-74-082**

**Regeneration of Chromated Aluminum Deoxidizers – REF. NO. EPA-660/2-73-023**

**Regenerative Limestone Process for Fluidized – Bed Coal Combustion and Desulfurization – REF. NO. EPA-650/2-74-001**

**Regional Governmental Arrangements in Metropolitan Areas: Nine Case Studies – REF. NO. EPA-600/5-74-024**

**Relationship Between Circumsolar Sky Brightness and Atmospheric Aerosols – REF. NO. EPA-650/4-75-012**

**Relationship Between Diameter and Height for the Design of a Swirl Concentrator as a Combined Sewer Overflow Regulator – REF.NO. EPA -670/2-74-039**

**Remote Sensing of Air Pollution in Urban Areas – REF. NO. EPA-650/2-73-026**

**Remote Sensing of Pollutants – Computerized Reduction of Long-Path Absorption Data – REF. NO. EPA-650/2-74-113**

**Removal of Chromium from Plating Rinse Water Using Activated Carbon – REF. NO. EPA-670/2-75-055**

**Removal of Heavy Metals from Mine Drainage by Precipitation – REF. NO. EPA-670/2-73-080**

# TITLE INDEX

Removal of Manganese From Mine Drainage by Ozone and Chlorine – REF. NO. EPA-670/2–75–006
Renovation of Secondary Effluent for Re-use as a Water Resource – REF. NO. EPA-660/2–74–016
Replacement of Activated Sludge Secondary Clarifiers by Dynamic Straining – REF. NO. EPA-670/2–75–045
Research and Development of a Selective Algaecide to Control Nuisance Algal Growth-Phase III – REF. NO. EPA-660/3–74–019
Research Needs and Priorities: Water Pollution Control Benefits and Cost – Volume II – REF. NO. EPA-600/5–73–008b
Research Status of Effects of Land Application of Animal Wastes – REF. NO. EPA-660/2–75–010
Research Study of Coal Preparation Plant and By-Product Coke Plant Effluents – REF. NO. EPA-660/2–74–050
Reverse Osmosis of Treated and Untreated Secondary Sewage Effluent – REF. NO. EPA-670/2–74–077
Reverse Osmosis of Treated and Untreated Secondary Sewage Effluent; Appendix A-2 and Appendix A-6 — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–027
Review of the Physiological Impact of Mercurials – REF. NO. EPA-660/3–73–022
Review of Environmental Impact Assessment Methodologies – REF. NO. EPA-600/5–74–002
Review of Landspreading of Liquid Municipal Sewage Sludge – REF. NO. EPA-670/2–75–049
Reviewing Environmental Impact Statements – Power Plant Cooling Systems, Engineering Aspects – REF. NO. EPA-660/2–73–016
Reviews of Current Literature on Analytical Methodology and Quality Control – Activities for 1973 through 1974 – REF.NO. EPA -670/4–74–003b
Role of Polyelectrolytes in Filtration Processes – REF. NO. EPA-670/2–74–032
Role of Solid-Gas Interactions in Air Pollution – REF. NO. EPA-650/3–74–007
Role of Trace Elements in Management of Nuisance Growths — Abstracted 600/9–75–001a — REF. NO. EPA-660/2–75–008
Rotating Biological Disk Wastewater Treatment Process – Pilot Plant Evaluation – REF. NO. EPA-670/2–73–027
Routing of Solid Waste Collection Vehicles, Final Report: Appendix A – Manual for Use of the Computer Codes — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–036a
Routing of Solid Waste Collection Vehicles: Appendix B – A Heuristic Solution to the M-Postmen's Problem — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–036b
Rum Distillery Slops Treatment by Anaerobic Contact Process – REF. NO. EPA-660/2–74–074
Saline Groundwater Produced with Oil and Gas – REF. NO. EPA-660/2–74–010
Salt Water Detection in the Cimarron Terrace, Oklahoma — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–74–033
Sampling Interface for Quantitative Transport of Aerosols – REF. NO. EPA-650/2–74–016
Sasol Type Process for Gasoline, Methanol, SNG, and Low-BTU Gas from Coal – REF. NO. EPA-650/2–74–072
Scale Control in Limestone Wet Scrubbing Systems – REF. NO. EPA-650/2–75–031
Scientific and Technical Assessment Report on Cadmium – REF. NO. EPA-600/6–75–003
Scientific and Technical Assessment Report on Manganese – REF. NO. EPA-600/6–75–002
Scientific and Technical Assessment Report on Particulate Polycyclic Organic Matter (PPOM) – REF. NO. EPA-600/6–75–001
Scientific Seminar on Automotive Pollutants – REF. NO. EPA-600/9–75–003
Scrap Rubber Tire Utilization in Road Dressings – REF. NO. EPA-670/2–74–014
Second Annotated Bibliography on Biological Effects of Metals in Aquatic Environments – REF. NO. EPA-660/3–75–023
Second U.S. – Japan Conference on Sewage Treatment Technology December 1–6, 1972 – REF. NO. EPA-670/9–74–003
Secondary Fiber Recovery Incentive Analysis – REF. NO. EPA-670/5–74–004
Secondary Impact of Transportation and Wastewater Investments: Review and Bibliography — Abstracted 600/9–75–001a — REF. NO. EPA-600/5–75–002
Sediments and Sediment-Water Nutrient Interchanges in Upper Klamath Lake, Oregon – REF. NO. EPA-660/3–74–015
Select Research Group in Air Pollution Meteorology, Second Annual Progress Report Volume I – REF. NO. EPA-650/4–74–045a
Select Research Group in Air Pollution Meteorology, Second Annual Progress Report Volume II – REF. NO. EPA-650/4–74–045b
Selected Abstracts for Instrumentation and Automation of Wastewater Facilities – REF. NO. EPA-670/2–73–104
Selected Characteristics of Hazardous Pollutant Emissions – REF. NO. EPA-600/2–74–004
Selected Irrigation Return Flow Quality Abstracts: 1972–1973 – REF. NO. EPA-660/2–74–049
Selective Nutrient Removal Secondary Effluent – REF. NO. EPA-670/2–73–076
Seminar on Electrostatics and Fine Particles — September 1973 – REF. NO. EPA-650/2–74–081
Seminar Summary: Sampling and Analysis of the Various Forms of Atmospheric Lead – REF. NO. EPA-650/2–75–003
Separation, Dewatering, and Disposal of Sugar Beet Transport Water Solids Phase I – REF. NO. EPA-660/2–74–093
Sewerage System Monitoring and Remote Control – REF. NO. EPA-670/2–75–020
Shrimp Canning Waste Treatment Study – REF. NO. EPA-660/2–74–061
Significance and Control of Waste Water Floatables in Coastal Waters – REF. NO. EPA-660/3–74–016
Silt Removal From a Lake Bottom — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–74–017
Simplified Atomic Absorption Determination of Stable Strontium in Milk and Hay – REF. NO. EPA-680/4–73–002
Simulation City Approach for Preparation of Urban Area Data Bases – REF. NO. EPA-600/5–74–001
Simultaneous and Automated Determination of Total Phosphorous and Total Kjeldahl – REF. NO. EPA-670/4–74–002
Single-Cell Protein From Waste Cellulose – REF. NO. EPA-670/2–73–095
Single-Stage Nitrification-Denitrification – REF. NO. EPA-670/2–75–051
Sludge Conditioning Using SO2 and Low Pressure for Production of Organic Feed Concentrate – REF. NO. EPA-670/2–73–062
Socio-Economic Factors Affecting Demand for Municipal Collection of Household Refuse – REF. NO. EPA-670/9–73–035
Sodium Conditioning to Reduce Fly Ash Resistivity – REF. NO. EPA-650/2–74–092
Soil Modification for Denitrification and Phosphate Reduction of Feed Lot Wastes – REF. NO. EPA-660/2–74–057
Solid Waste Conversion: Cellulose Liquefaction — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–031

# TITLE INDEX

Solid Waste Disposal Final Report – REF. NO. EPA-650/2–74–033
Source Assessment Prioritization of Air Pollution from Industrial Surface Coating Operations – REF. NO. EPA-650/2–75–019a
Sources and Characterization of Fine Particulate Test Dusts – REF. NO. EPA-650/2–74–117
Sources and Natural Removal Processes for Some Atmospheric Pollutants – REF. NO. EPA-650/4–74–032
Sources of Oil and Water in Bilges of Great Lakes Ships – REF. NO. EPA-670/2–74–054
Specific Ion Mass Spectrometric Detection for Gas Chromatographic Pesticide Analysis – REF. NO. EPA-660/2–74–004
Specifications for Materials Recovered from Municipal Refuse – REF. NO. EPA-670/2–75–034
Spectroscopic Study of California Smog – REF. NO. EPA-650/4–75–006
St. Louis Refuse Processing Plant Equipment, Facility, and Environmental Evaluations – REF. NO. EPA-650/2–75–044
St. Louis/Union Electric Refuse Firing Demonstration Air Pollution Test Support – REF. NO. EPA-650/2–74–073
State of the System (SOS) Model – REF. NO. EPA-600/5–73–013
State of Maryland Waste Oil Recovery and Reuse Program – REF. NO. EPA-670/2–74–013
State-of-the-Art Report on Sampling of Particulates in Combustion Gases from Fossil Fuels – REF. NO. EPA-650/2–74–018
State-of-the-Art Review: Water Pollution Control Benefits and Costs – Volume I – REF. NO. EPA-600/5–73–008a
State-of-the-Art: Sand and Gravel Industry – REF. NO. EPA-660/2–74–066
State-of-the-Art: Uranium Mining, Milling, and Refining Industry – REF. NO. EPA-660/2–74–038
State-of-the-Art: 1971 Instrumentation for Measurement of Particulate Emissions from Combustion Sources – REF.NO. EPA -650/2–73–022
State-of-The-Art For The Inorganic Chemicals Industry: Commercial Explosives — Abstracted 600/9–75–001a — REF.NO. EPA -600/2–74–009b
State-of-The-Art For The Inorganic Chemicals Industry: Industrial Inorganic Gases — Abstracted 600/9–75–001a — REF.NO. EPA -600/2–74–009c
State-of-The-Art For The Inorganic Chemicals Industry: Inorganic Pesticides — Abstracted 600/9–75–001a — REF.NO. EPA -600/2–74–009a
Statistical Concepts for Design Engineers – REF. NO. EPA-650/2–74–080
Statistical Prediction of Equilibrium Temperature From Standard Meteorological Data Bases – REF. NO. EPA-660/2–73–003
Statistical Questions Relating to the Validation of Air Quality Simulation Models – REF. NO. EPA-650/4–75–010
Stone & Webster/Ionics SO$B2$A Removal and Recovery Process: Phase I, Final Report – REF. NO. EPA-650/2–75–045
Storage and Disposal of Iron Ore Processing Wastewater – REF. NO. EPA-660/2–74–018
Storm Water Management Model: Dissemination and User Assistance – REF. NO. EPA-670/2–75–041
Storm Water Management Model: User's Manual – Version II — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–017
Stream Pollution Abatement by Supplement Pumping — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–035
Structure and Reactivity of Adsorbed Oxides of Sulfur – REF. NO. EPA-650/3–74–006
Studies in Environment – Volume I – Summary Report – REF. NO. EPA-600/5–73–012a
Studies in Environment – Volume II – Quality of Life – REF. NO. EPA-600/5–73–012b
Studies in Environment – Volume III – Pollution and the Municipality – REF. NO. EPA-600/5–73–012c
Studies in Environment – Volume IV – Consumption Differentials and the Environment – REF. NO. EPA-600/5–73–012d
Studies in Environment – Volume V – Outdoor Recreation and the Environment – REF. NO. EPA-600/5–73–012e
Studies of Low Molecular Weight Lignin Sulfonates – REF. NO. EPA-660/2–74–069
Studies of Pollutant Concentration Frequency Distributions – REF. NO. EPA-650/4–75–004
Studies on Effects of Thermal Pollution in Biscayne Bay in Florida – REF. NO. EPA-660/3–74–014
Studies on Modifications of Solid Industrial Wastes – REF. NO. EPA-670/2–73–065
Studies on Southeastern Aquatic Insects – REF. NO. EPA-660/3–73–016
Studies to Determine Methods for Culturing Three Freshwater Zooplankton Species — Abstracted 600/9–75–001a — REF.NO. EPA -660/3–75–010
Study of an Integrated Power, Water and Wastewater Utility Complex – REF. NO. EPA-670/2–74–080
Study of the Ecology of Pesticides – REF. NO. EPA-650/1–74–012
Study of the Economics of Hospital Solid Waste Systems – REF. NO. EPA-670/5–73–020
Study of the Effects of Low Levels of Carbon Monoxide Upon Humans Performing Driving Tasks – REF. NO. EPA-650/1–74–006
Study of the Social and Economic Impact of Odors – Phase III – REF. NO. EPA-650/5–73–001
Study of Air Pollutant Emissions from Residential Heating Systems – REF. NO. EPA-650/2–74–003
Study of Combustor Flow Computations and Comparison with Experiment – REF. NO. EPA-650/2–73–045
Study of Corrosion in Municipal Incinerators Versus Refuse Composition — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–084
Study of Factors Affecting Reactions in Environmental Chambers Final Report on Phase II – REF. NO. EPA-650/3–74–004a
Study of Feasibility of Herbicide Orange Chlorinolysis – REF. NO. EPA-600/2–74–006
Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume I – REF. NO. EPA-670/2–73–014
Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume II – REF. NO. EPA-670/2–73–015
Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume III – REF. NO. EPA-670/2–73–016
Study of Incinerator Residue Analysis of Water Soluble Components – REF. NO. EPA-670/2–73–057
Study of Indoor Air Quality – REF. NO. EPA-650/4–74–042
Study of Institutional Solid Wastes – REF. NO. EPA-670/2–73–083
Study of Potential Problems and Optimum Opportunities in Retrofitting Industrial Processes to Low and Intermediate Energy Gas from Coal – REF. NO. EPA-650/2–74–052
Study of SOx Control For Selected Industrial Boilers – REF. NO. EPA-600/2–75–011

# TITLE INDEX

Study of Upflow Filter for Tertiary Treatment – REF. NO. EPA-670/2–73–074
Study on Technical and Economic Feasibility of a Hydrogenation Process for Utilization of Waste Rubber – REF. NO. EPA-670/2–73–066
Submerged Combustion Evaporator for Concentration of Brewery Spent Grain Liquor – REF. NO. EPA-660/2–74–059
Subsurface Biological Activity in Relation to Ground Water Pollution – REF. NO. EPA-660/2–73–014
Sulfur and Nitrogen Balances in the Solvent Refined Coal Process – REF. NO. EPA-650/2–75–011
Sulfur Compound Emissions of the Petroleum Production Industry – REF. NO. EPA-650/2–75–030
Sulfur Content of Douglas Fir Foliage Near a Paper Mill – REF. NO. EPA-660/3–74–018
Sulfur Oxide Throwaway Sludge Evaluation Panel (SOTSEP), Volume I: Final Report – Executive Summary – REF.NO. EPA -650/2–75–010a
Sulfur Oxide Throwaway Sludge Evaluation Panel (SOTSEP), Volume II: Final Report – Technical Discussion – REF.NO. EPA -650/2–75–010b
Sulfuric Acid and Ferrous Sulfate Recovery From Waste Pickle Liquor – REF. NO. EPA-660/2–73–032
Summary Report – Pilot Plant Studies on Dewatering Primary Digested Sludge – REF. NO. EPA-670/2–73–043
Summary Report, Trail-Marking and Alarm Pheromones of Some Ants of the Genus Atta – REF. NO. EPA-660/2–74–081
Summary Report: Workshop on Ozone Measurement by the Potassium Iodide Method – REF. NO. EPA-650/4–75–007
Surge Facility for Wet and Dry Weather Flow Control – REF. NO. EPA-670/2–74–075
Survey of Corrosion Products in the Seattle Water Department Tolt Distribution – REF. NO. EPA-670/2–75–036
Survey of Manual Methods of Measurements of Asbestos, Beryllium, Lead, Cadmium, Selenium, and Mercury in Stationary Source Emissions – REF. NO. EPA-650/4–74–015
Survey of Users of the EPA – Reference Method for Measurement of Non-Methane Hydrocarbons in Ambient Air – REF.NO. EPA -650/4–75–008
Survival of Pathogens in Animal Manure Disposal – REF. NO. EPA-670/2–73–051
Survival of Pathogens in Animal Manure Disposal – REF. NO. EPA-660/2–75–012
Suspended Solids Monitor — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–002
Symposium on Electrostatic Precipitators for the Control of Fine Particles – REF. NO. EPA-650/2–75–016
Symposium on Flue Gas Desulfurization – Atlanta, November 1974 Volume I – REF. NO. EPA-650/2–74–126a
Symposium Proceedings: Environmental Aspects of Fuel Conversion Technology (May 1974, St. Louis, Missouri) – REF.NO. EPA -650/2–74–118
Synergistic Effect of Polonium-210 and Cigarette Smoke in Rats – REF. NO. EPA-680/1–75–001
Synthesis and Purification of Carcinogenic Polynuclear Aromatic Hydrocarbon Standards – REF. NO. EPA-650/2–74–040
Synthesis of Trifluoromethylsulfur Pentafluoride (CF3SF5) – REF. NO. EPA-650/4–74–010
System Alternatives in Oxygen Activated Sludge — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–008
System Analysis of Air Pollutant Emissions from the Chemical/ Plastics Industry – REF. NO. EPA-650/2–74–106
Systems Analysis Requirements for Nitrogen Oxide Control of Stationary Sources – REF. NO. EPA-650/2–74–091
Systems Simulation and Solid Waste Planning: A Case Study – REF. NO. EPA-670/5–73–012
SWIRL Concentrator as a Grit Separator Device – REF. NO. EPA-670/2–74–026
Taxonomy and Ecology of Stenonema Mayflies (Heptageniidae: Ephemeroptera) — Abstracted 600/9–75–001a — REF.NO. EPA -670/4–74–006
Technical and Economic Evaluation of Cooling Systems Blowdown Control Techniques – REF. NO. EPA-660/2–73–026
Techniques for Measuring Fly Ash Resistivity – REF. NO. EPA-650/2–74–079
Temperature Effects on Eggs and Fry of Percoid Fishes – REF. NO. EPA-660/3–75–017
Tertiary Treatment With a Controlled Ecological System – REF. NO. EPA-660/2–73–022
Test Method for Volatile Component Stripping of Wastewater – REF. NO. EPA-660/2–74–044
Testing of a Molecular Sieve Used to Control Mercury Emission From A Chlor-Alkali Plant, Volume I – REF. NO. EPA-650/2–75–026a
Testing of a Molecular Sieve Used to Control Mercury Emission From A Chlor-Alkali Plant, Volume II – Appendices – REF.NO. EPA -650/2–75–026b
Theoretical and Experimental Study of the Lime/Limestone Wet Scrubbing Process – REF. NO. EPA-650/2–75–006
Theoretical Model and Solubility Characteristics of Aroclor R 1254 in Water: Problems Associated with Low-Solubility Compounds in Aquatic Toxicity Test — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–74–013
Thermal Radiation Modeling for Pollution Predictions – REF. NO. EPA-650/2–74–011
Thermophilic Aerobic Digestion of Organic Solid Wastes – REF. NO. EPA-670/2–73–061
Third U.S. — Japan Conference on Sewage Treatment Technology, Proceedings, February 12 – 16, 1974 – REF. NO. EPA-670/9–75–005
Tissue Enzyme Assay for Chlorinated Hydrocarbon Insecticides – REF. NO. EPA-660/2–73–027
Toxicity of Selected Pesticides to the Bay Mussel (Mytilus edulis) – REF. NO. EPA-660/3–75–016
Trace Pollutant Emissions from the Processing of Metallic Ores – REF. NO. EPA-650/2–74–115
Trace Pollutant Emissions from the Processing of Non-Metallic Ores – REF. NO. EPA-650/2–74–122
Training Manual for Teratology – REF. NO. EPA-650/1–73–001
Travels of Airborne Pollen – REF. NO. EPA-650/3–75–003
Treatment and Recovery of Fluoride Industrial Waste – REF. NO. EPA-660/2–73–024
Treatment and Ultimate Disposal of Cattle Feedlot Wastes – REF. NO. EPA-660/2–75–013
Treatment of Cheese Processing Wastewaters in Aerated Lagoons – REF. NO. EPA-660/2–74–012
Treatment of Domestic Wastewater and NSSC Pulp and Paper Mill Wastes – REF. NO. EPA-660/2–73–010
Treatment of Hazardous Material Spills With Floating Mass Transfer Media – REF. NO. EPA-670/2–73–078
Treatment of Packing House Waste by Anaerobic Lagoons in Plastic-Media Filters – REF. NO. EPA-660/2–74–027

# TITLE INDEX

**Treatment of Sulfite Evaporator Condensates for Recovery of Volatile Components – REF. NO. EPA-660/2–73–030**
**Turbulent Diffusion in Liquid Jets: Final Report – REF. NO. EPA-660/3–74–004b**
**Turbulent Diffusion in Liquid Jets: Part I – REF. NO. EPA-660/3–74–004a**
**U-Tube Aeration – REF. NO. EPA-670/2–73–031**
**Up-Dip Versus Down-Dip Mining: An Evaluation – REF. NO. EPA-670/2–75–047**
**Upgrading Wastewater Stabilization Ponds to Meet New Discharge Standards — Abstracted 600/9–75–001a — REF.NO.** EPA -670/9–75–004
**Urban Stormwater Management and Technology: An Assessment – REF. NO. EPA-670/2–74–040**
**Urban Stormwater Management Modeling and Decision-Making – REF. NO. EPA-670/2–75–022**
**Urban Street Cleaning — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–030**
**Use of Domestic Waste Glass for Urban Paving – REF. NO. EPA-670/2–73–038**
**Use of Domestic Waste Glass for Urban Paving – Summary Report – REF. NO. EPA-670/2–75–053**
**Use of Environmental Analyses on Wastewater Facilities by Local Government – REF. NO. EPA-600/5–74–015**
**Use of Leucocyte Metabolism as a Health Effects Indicator – REF. NO. EPA-650/1–74–013**
**Use of Panelist as Substitutes for Taxicab Drivers in Carbon Monoxide Exposure – REF. NO. EPA-650/1–74–001**
**Use of Soil Parameters for Describing Pesticide Movement Through Soils – REF. NO. EPA-660/2–75–009**
**Used Oil Law in the U.S. and Europe – REF. NO. EPA-600/5–74–025**
**User's Guide for Hiway, A Highway Air Pollution – REF. NO. EPA-650/4–74–008**
**User's Manual for the APRAC-1A Urban Diffusion Model Computer Program – REF. NO. EPA-650/3–73–001**
**Utilization of Bark Waste – REF. NO. EPA-670/2–73–005**
**Utilization of Fibrous Wastes as Sources of Nutrients – REF. NO. EPA-670/2–73–090**
**Utilization of Trickling Filters for Dual Treatment of Dry and Wet Weather Flows – REF. NO. EPA-670/2–73–071**
**Vinyl Chloride – An Assessment of Emissions Control Techniques and Costs – REF. NO. EPA-650/2–74–097**
**Virus in Waste, Renovated, and Other Waters – 1973 Literature Abstracts – REF. NO. EPA-670/9–74–005**
**Viruses in Waste Renovated and Other Viruses – 1972 Literature Abstracts – REF. NO. EPA-670/2–73–003**
**Volatization of Losses of Pesticides from Soil – REF. NO. EPA-660/2–74–054**
**Waste Automotive Lubricating Oil Reuse as a Fuel – REF. NO. EPA-600/5–74–032**
**Waste Citrus Activated Sludge As a Poultry Feed Ingredient — Abstracted 600/9–75–001a — REF. NO. EPA-660/2–75–001**
**Waste Control and Abatement in the Processing of Sweet Potatoes – REF. NO. EPA-660/2–73–021**
**Waste Oil Recycling and Disposal – REF. NO. EPA-670/2–74–052**
**Waste Treatment System for Confined Hog Raising Operations – REF. NO. EPA-660/2–74–047**
**Waste Water Treatment and Reuse in a Metal Finishing Job Shop – REF. NO. EPA-670/2–74–042**
**Wastewater Abatement in Canning Vegetables by IQB Blanching – REF. NO. EPA-660/2–74–006**
**Wastewater Characterization for the Specialty Food Industry – REF. NO. EPA-660/2–74–075**
**Wastewater Treatment and Reuse By Land Application, Volume I – Summary – REF. NO. EPA-660/2–73–006a**
**Wastewater Treatment and Reuse By Land Application, Volume II – Summary – REF. NO. EPA-660/2–73–006b**
**Wastewater Use in the Production of Food and Fiber—Proceedings of Conference held at Oklahoma City, OK March 5–7, 1974 – REF. NO. EPA-660/2–74–041**
**Water and Waste Management in Poultry Processing – REF. NO. EPA-660/2–74–031**
**Water Quality Control in Mine Spoils — Upper Colorado River Basin – REF. NO. EPA-670/2–75–048**
**Water Quality Effect of Diking a Shallow Arid-Region Lake — Abstracted 600/9–75–001a — REF. NO. EPA-660/2–75–007**
**Water Quality Model for a Conjunctive Surface – Groundwater System – REF. NO. EPA-600/5–74–013**
**Water Quality Requirements of Aquatic Insects – REF. NO. EPA-660/3–73–004**
**Water Recycle/Reuse Possibilities: Power Plant Boiler and Cooling System – REF. NO. EPA-660/2–74–089**
**Water Renovation of Municipal Effluents by Reverse Osmosis — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–009**
**Waterborne Wastes of the Paint and Inorganic Pigments Industries – REF. NO. EPA-670/2–74–030**
**Weed Harvest and Lake Nutrient Dynamics – REF. NO. EPA-660/3–73–001**
**Wet Scrubber Liquid Utilization – REF. NO. EPA-650/2–74–108**
**Wet Systems for Residential Refuse Collection: A Case Study for Springfield, Massachusetts – REF. NO. EPA-670/2–74–038**
**Wind Tunnel Tests of Negatively Buoyant Plumes – REF. NO. EPA-650/3–74–003**
**Wood Waste Reuse in Controlled Release Pesticides – REF. NO. EPA-670/2–73–034**
**World's Air Quality Management Standards: Volume 1 – The Air Quality Management Standards of the World, Including United States Federal Standards – REF. NO. EPA-650/9–75–001a**
**World's Air Quality Management Standards: Volume II – The Air Quality Management Standards of the United States – REF.NO.** EPA -650/9–75–001b
**Zooplankton Production in Lake Ontario as Influenced by Environmental Perturbations – REF. NO. EPA-660/3–75–021**
**200 MGD Activated Sludge Plant Removes Phosphorus by Pickle Liquor – REF. NO. EPA-670/2–73–050**

# ADDITIONAL TITLES

Preceding page blank

# CURRENT PROGRAM AREA INDEX

## HEALTH EFFECTS

Actions of Pesticides and Other Drugs on the Male Reproductive System – REF. NO. EPA-650/1–74–011
Air Pollution Exposure and Immunoglobulin Levels – REF. NO. EPA-650/1–75–005
Cadmium in the Environment – III A Toxicological and Epidemiological Appraisal – REF. NO. EPA-650/2–75–049
Comparability of Nine Methods for Monitoring NO2 in Ambient Air – REF. NO. EPA-650/4–74–012
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Summary Report – REF. NO. EPA-670/2–75–050a
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix A. Weather and Lake Level Data, Water Quality Data, and Raw Water Pumping Schedule – REF. NO. EPA-670/2–75–050b
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix B. Design, Installation and Operation of Pilot Filters. Appendix C. Summary of Data for Individual Filter Runs – REF. NO. EPA-670/2–75–050c
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix D. Head Loss and Turbidity Curves for Individual Filter Runs – REF. NO. EPA-670/2–75–050d
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix E. Ontario Research Foundation Electron Microscope Analysis Results. Appendix F. EPA National Water Quality Laboratory X-Ray Diffraction Analysis Results. Appendix G. University of Minnesota at Duluth Electron Microscope Analysis Results – REF. NO. EPA-670/2–75–050e
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix H. Comparison of Turbidimeters – REF.NO. EPA -670/2–75–050f
Direct Filtration of Lake Superior Water for Asbestiform Fiber Removal – Appendix I. Diatomite Filters for Asbestiform Fiber Removal from Water – REF. NO. EPA-670/2–75–050g
Effect of Carbon Monoxide on Time Perception – REF. NO. EPA-650/1–74–005
Epidemiology of Chronic Respiratory Disease: A Literature Review – REF. NO. EPA-650/1–74–007
Fluorescence Immunoassay Technique for Detecting Organic Environmental Contaminants – REF. NO. EPA-650/1–75–004
Formation of Halogenated Organics By Chlorination of Water Supplies – REF. NO. EPA-600/1–75–002
Handbook for Evaluating Water Bacteriology – REF. NO. EPA-670/9–75–006
Health and Annoyance Impact of Odor Pollution – REF. NO. EPA-650/1–75–001
Health Consequences of Sulfur Oxides: A Report from CHESS,1970–1971 – REF. NO. EPA-650/1–74–004
Interactions of Various Air Pollutants on Causation of Pulmonary Disease – REF. NO. EPA-650/1–73–002
Investigation of the Effects of Carbon Monoxide on Humans in the Driving Task – REF. NO. EPA-650/1–73–003
Lead: Environmental Sources and Red Cell Toxicity in Urban Children – REF. NO. EPA-650/1–75–003
Mathematical Analysis of the Kinetics of Viral Inactivation – REF. NO. EPA-670/2–74–067
Metabolism of Carbamate Insecticides – REF. NO. EPA-650/1–74–002
Microbiological Production of Geosmin – REF. NO. EPA-670/2–74–094
Normal Carboxyhemoglobin Levels of Blood Donors in the United States – REF. NO. EPA-650/1–73–004
Occupational and Environmental Pesticide Exposure Study in South Florida – REF. NO. EPA-650/1–75–002
Pesticides Epidemiological Field Studies – REF. NO. EPA-650/1–74–009
Pricing for Water Supply: Its Impact on Systems Management – REF. NO. EPA-670/1–74–001
Reactivity of Polynuclear Aromatic Hydrocarbons with O2 and NO in the Presence of Light – REF. NO. EPA-650/1–74–010
Scientific and Technical Assessment Report on Cadmium – REF. NO. EPA-600/6–75–003
Scientific and Technical Assessment Report on Manganese – REF. NO. EPA-600/6–75–002
Scientific and Technical Assessment Report on Particulate Polycyclic Organic Matter (PPOM) – REF. NO. EPA-600/6–75–001
Study of the Ecology of Pesticides – REF. NO. EPA-650/1–74–012
Study of the Effects of Low Levels of Carbon Monoxide Upon Humans Performing Driving Tasks – REF. NO. EPA-650/1–74–006
Study of the Social and Economic Impact of Odors – Phase III – REF. NO. EPA-650/5–73–001
Survey of Corrosion Products in the Seattle Water Department Tolt Distribution – REF. NO. EPA-670/2–75–036
Synergistic Effect of Polonium-210 and Cigarette Smoke in Rats – REF. NO. EPA-680/1–75–001
Training Manual for Teratology – REF. NO. EPA-650/1–73–001
Use of Leucocyte Metabolism as a Health Effects Indicator – REF. NO. EPA-650/1–74–013
Use of Panelist as Substitutes for Taxicab Drivers in Carbon Monoxide Exposure – REF. NO. EPA-650/1–74–001
World's Air Quality Management Standards: Volume 1 – The Air Quality Management Standards of the World, Including United States Federal Standards – REF. NO. EPA-650/9–75–001a
World's Air Quality Management Standards: Volume 11 – The Air Quality Management Standards of the United States – REF.NO. EPA -650/9–75–001b

## ECOLOGICAL PROCESSES AND EFFECTS

Acid Hydrolysis of Cellulose in Refuse to Sugar and Its Fermentation to Alcohol – REF. NO. EPA-670/2–73–011
Acquisition and Culture of Research Fish — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–011
Aerosol Formation from Gas-Phase Reactions of Ozone and Olefin in the Presence of Sulfur Dioxide – REF. NO. EPA-650/4–74–034

Preceding page blank

# CURRENT PROGRAM AREA INDEX

## ECOLOGICAL PROCESSES AND EFFECTS

Air Pollution Effects on Catastrophic Failure of Metals – REF. NO. EPA-650/3–74–009
An Investigation of Ion Removed From Water and Wastewater – REF. NO. EPA-660/3–74–022
Analysis of the Abandoned Automobile Problem – REF. NO. EPA-670/2–73–013
Analysis of the Composition of the Atmosphere in the Los Angeles Basin – REF. NO. EPA-650/2–74–105
Analysis of the Current Impact of Plastic Refuse Disposal Upon the Environment — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–74–083
Analysis of the Dynamics of DDT in Marine Sediments — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–013
Analysis Models for Solid Waste Collection — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–026a
Analysis Models for Solid Waste Collection — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–026b
Application of Repro-Modeling to the Analysis of a Photochemical Air Pollution Model – REF. NO. EPA-650/4–74–001
Applications of Growth and Sorption Algal Assays – REF. NO. EPA-660/3–73–023
Assessment of Wet Systems for Residential Refuse Collection: A Summary Report – REF. NO. EPA-670/2–74–068
Atmospheric Measurement of Photochemical Smog Reactions – A Preliminary Analysis – REF. NO. EPA-650/4–74–037
Big Eddies and Mixing Processes in the Great Lakes – REF. NO. EPA-660/3–73–011
Bio-Environmental Impact of Air Pollution from Fossil Fuel Power Plants – REF. NO. EPA-660/3–74–011
Biological Control of Aquatic Vegetation – REF. NO. EPA-660/3–74–007
Biological Conversion of Animal Wastes to Nutrients – REF. NO. EPA-670/2–73–009
Biological Models of Freshwater Communities – REF. NO. EPA-660/3–73–008
Biologically Allowable Thermal Pollution Limits, Parts I and II – REF. NO. EPA-660/3–74–003
Capacity of the Soil as a Natural Sink for Carbon Monoxide – REF. NO. EPA-650/2–73–043
Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. I – Summary – REF. NO. EPA-670/2–75–033a
Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. II – Municipal Sludges – REF. NO. EPA-670/2–75–033b
Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. III – Utility Coal Ash – REF. NO. EPA-670/2–75–033c
Characterization and Utilization of Municipal and Utility Sludges and Ashes: Vol. IV – Municipal Incinerator Residues – REF.NO. EPA -670/2–75–033d
Chemical Characterization of Model Aerosols – REF. NO. EPA-650/3–74–011
Chemical Conversion of Solid Waste to Useful Products – REF. NO. EPA-670/2–74–027
Chemical Conversion of Wood and Cellulosic Wastes – REF. NO. EPA-670/2–74–015
Chemistry of Organmercurials in Aquatic Systems – REF. NO. EPA-660/3–73–012
Chena River—A Study of a Subarctic Stream – REF. NO. EPA-660/3–75–019
Chlorinated Hydrocarbons in the Lake Ontario Ecosystem (IFYGL) – REF. NO. EPA-660/3–75–022
Cladophora Distribution in Lake Ontario (IFYGL) — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–74–028
Combustion Products from the Incineration of Plastics – REF. NO. EPA-670/2–73–049
Composted Municipal Refuse as a Soil Amendment – REF. NO. EPA-670/2–73–063
Comprehensive Technical Report on all Atmospheric Contaminants Associated with Photochemical Air Pollution – REF.NO. EPA -650/4–75–002
Conceptual Model for the Movement of Pesticides Through the Environment – REF. NO. EPA-660/3–74–024
Culturing and Ecology of Diaptomus Clavipes and Cyclops Vernalis – REF. NO. EPA-660/3–74–006
Degradation Mechanism: Controlling the Bioaccumulation of Hazardous Materials — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–75–005
Design and Control of Incinerators, Volume I – REF. NO. EPA-670/2–73–089A
Design and Control of Incinerators, Volume II – Appendices – REF. NO. EPA-670/2–73–089B
Design and Performance Considerations for a Pilot Process for Separating Mixed Municipal Refuse – REF. NO. EPA-670/2–75–040
Design of the EPA Semi-Trailer Mobile Air Pollution Laboratory – REF. NO. EPA-650/4–74–017
Determination of the Formation Mechanisms and Composition of Photochemical Aerosols – REF. NO. EPA-650/3–73–002
Determination of Effect of Particulate Exhaust Emissions of Additives and Impurities in Gasoline – REF. NO. EPA-650/2–74–061
Determination of Energetic Characteristics of Urban-Rural Surfaces in the Greater St. Louis Area – REF. NO. EPA-650/4–74–007
Development and Testing of An Air Monitoring System – REF. NO. EPA-650/2–74–019
Development of a Methodology for the Assessment of the Effects of Fuels and Additives on Control Devices – REF.NO. EPA -650/2–74–060
Development of a Selective Algaecide to Control Nuisance Algal Growth – REF. NO. EPA-660/3–73–006
Development of an Acetylene Monitor at the PPB Level – REF. NO. EPA-650/2–74–056
Development of Air Particulate Monitoring Systems – REF. NO. EPA-650/4–74–030
Development of Analytic Techniques to Measure Human Exposure to Fuel Additives – REF. NO. EPA-650/1–74–003
Development of Modeling Technique for Photochemical Air Pollution – REF. NO. EPA-650/4–74–003
Development of Sample Preparation Methods for Development of Marine Organisms – REF. NO. EPA-660/3–74–026
Development of Sampling Devices for Gaseous Atmospheric Tracers – REF. NO. EPA-650/4–74–050
Diffusion in Turbulent Surface Layer and the Development of an Atmospheric Wind Tunnel – REF. NO. EPA-650/4–74–041
Dispersal Processes in Lake Huron – REF. NO. EPA-660/2–74–082
Dispersion in Hydrologic and Coastal Environments – REF. NO. EPA-660/3–73–010
Dynamic Water Quality Forecasting and Management – REF. NO. EPA-660/3–73–009
Dynamics and Diffusion in the Great Lakes – REF. NO. EPA-660/2–74–083

# CURRENT PROGRAM AREA INDEX

## ECOLOGICAL PROCESSES AND EFFECTS

Early Life History and Feeding of Young Mountain Whitefish – REF. NO. EPA-660/3–73–019
Economic Analysis of the Processing and Disposal of Refuse Sludges – REF. NO. EPA-670/2–74–037
Effect of Fuel Additives Study – REF. NO. EPA-650/2–74–096
Effect of Gasoline Additives on Gaseous Emissions – REF. NO. EPA-650/2–75–014
Effect of Geographical Variation on Performance of Recirculating Cooling Ponds – REF. NO. EPA-660/2–74–085
Effect of Meteorological Variables on Temperature Changes in Flowing Streams — Abstracted 600/9–75–001a — REF.NO. EPA -660/3–75–002
Effect of Mirex and Carbofuran on Estuarine Microorganisms – REF. NO. EPA-660/3–75–024
Effect of Phosphorus Removal Processes on Algal Growth – REF. NO. EPA-660/3–73–015
Effect of Processing Poultry Manure on Disease Agents – REF. NO. EPA-670/2–73–041
Effects of Air Pollutants on Textile Fibers and Dyes – REF. NO. EPA-650/3–74–008
Effects of Crude Oil and Some of Its Components on Young Coho and Sockeye Salmon – REF. NO. EPA-660/3–73–018
Effects of Forest Fires on Water Quality in Interior Alaska – REF. NO. EPA-660/3–75–020
Effects of Mirex and Methoxychlor on Striped Mullet, Mugil cephalus L. — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–015
Effects of Protozoa on the Fate of Particulate Carbon – REF. NO. EPA-660/3–73–007
Effects of Temperature on Diseases of Salmonid Fishes – REF. NO. EPA-660/3–73–020
Effects of Water Pollution Controls on Solid Waste Generation, 1971 to 1985: Executive Summary — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–095a
Environmental Assessment of Future Disposal Methods for Plastics in Municipal Solid Waste – REF. NO. EPA-670/2–75–058
Environmental Chamber Studies of Atmospheric Aerosols – REF. NO. EPA-650/4–74–009
Environmental Guidelines for Development Roads in the Subarctic – REF. NO. EPA-660/3–74–009
Environmental Requirements of Selected Estuarine Ciliated Protozoa – REF. NO. EPA-660/3–74–031
Estimating Nutrient Loadings of Lakes from Non-Point Sources – REF. NO. EPA-660/3–74–020
Eutrophication of Lake Tahoe Emphasizing Water Quality – REF. NO. EPA-660/3–74–034
Eutrophication of Surface Waters—Lake Tahoe's Indian Creek Reservoir — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–003
Evaluation of Health Hazards Associated With Solid Waste Sewage Sludge Mixtures – REF. NO. EPA-670/2–75–023
Experimental High Ash Papermill Sludge Landfill – First Annual Report — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–076a
Experimental High Ash Papermill Sludge Landfill – Second Annual Report — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–74–076b
Exploratory Study of Factors Affecting Aerosol Formation – REF. NO. EPA-650/3–75–002
Fabrication of Monitoring System for Determining Mass and Composition of Aerosol as a Function of Time – REF. NO. EPA-650/2–75–048
Fabrication of Single Cell Protein From Cellulosic Wastes — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–032
Fate of Select Pesticides in the Aquatic Environment – REF. NO. EPA-660/3–74–025
Feasibility of Hydraulic Transport and Treatment of Ground Household Refuse Through Sewers – REF. NO. EPA-670/2–74–019
Feasibility of Hydraulic Transport of Ground Household Refuse Through Sewer Appurtenances – REF. NO. EPA-670/2–74–021
Feasibility of Metrac System for Regional Air Pollution Study – REF. NO. EPA-650/4–74–051
Feasibility Study of Use of Molten Salt Technology for Pyrolysis of Solid Waste – REF. NO. EPA-670/2–75–014
First Annual Progress Report on a Study of Corrosion in Municipal Incinerators – REF. NO. EPA-670/2–73–032
First Annual Report: Routing of Solid Waste Collection Vehicles and Appendix B – Optimal Routing of Solid Waste Collection Vehicles — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–035b
First Annual Report: Routing of Solid Waste Collection Vehicles and Appendix A – A Linear Programming Approach for the Traveling Salesman Problem — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–035a
First Annual Reports of EPA Grants Funded for IFYGL – REF. NO. EPA-660/3–73–021
Fisheries and Energy Production: A Symposium – REF. NO. EPA-600/3–75–001
Flow Establishment and Initial Entrainment of Heated Water Surface Jets — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–014
Forecast of the Effects of Air and Water Controls of Solid Waste Generation — Abstracted 600/9–75–001a — REF.NO. EPA -670/2–74–095b
Formation of Aerosols in a Photochemical Fast Row Reactor – REF. NO. EPA-650/3–75–004
Future Dredging Quantities in the Great Lakes — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–74–029
Ground Water Contamination in the Northeast States – REF. NO. EPA-660/2–74–056
Ground-Water Pollution Problems in the Northwestern United States – REF. NO. EPA-660/3–75–018
Haze Formation: It's Nature and Origin – 1973 – REF. NO. EPA-650/3–74–002
Heavy Metal Accumulation in Soil and Vegetation From Smelter Emissions – REF. NO. EPA-660/3–74–012
High-Temperature Vortex Incinerator — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–025
Highway Air Pollution Measurement Program Using Sulfur Hexafluoride Tracer Gas – REF. NO. EPA-650/4–74–043
Hospital Solid Waste Disposal in Community Facilities – REF. NO. EPA-670/2–73–048
Impact of the Use of Microorganisms on the Aquatic Environment — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–001
Incineration of Bulky Refuse Without Prior Shredding – REF. NO. EPA-670/2–73–023
Incineration of Plastics Found in Municipal Wastes – REF. NO. EPA-670/2–73–087
Industrial Chemicals Solid Waste Generation — The Significance of Process Resource Recovery, and Improved Disposal – REF.NO. EPA -670/2–74–078
Industrial Solid Waste Classification Systems — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–024

# CURRENT PROGRAM AREA INDEX

## ECOLOGICAL PROCESSES AND EFFECTS

Infrared Spectral Sensor for Refuse Sorting – REF. NO. EPA-670/2–74–031

Invariant Modeling of Turbulence and Diffusion in the Planetary Boundary Layer – REF. NO. EPA-650/4–74–035

Investigation of Corrosion Deposition Phenomena on Gas Turbine Blades – REF. NO. EPA-670/2–73–006

Laboratory and Numerical Simulation of Plume Dispersion in Stably Stratified Flow Over Complex Terrain – REF. NO. EPA-650/4–74–044

Laboratory Analyses of Atmospheric Hydrocarbon – California South Coast Air Basin (Los Angeles Air Quality Control Region) August – November 1973 – REF. NO. EPA-650/4–74–052

Lidar Studies of Stack Plumes in Rural and Urban Environments – REF. NO. EPA-650/4–73–002

Limited SO2 and NOX Measurements in St. Louis, 1974: Volume I – Plume Tracking by Correlation Spectroscopy – REF.NO. EPA -650/2–75–005a

Limited SO$B2$A and NO$BX$A Measurements in St. Louis, 1974: Volume II, Longline Ambient SO$B2$A Monitor and Variability of SO$B2$A and NO$BX$A – REF. NO. EPA-650/2–75–005b

Limnological Studies of Flat-head, Montana: A Status Report – REF. NO. EPA-660/3–74–023

Literature Search and Analysis of Information Regarding Sources, Uses, Production, Consumption, Reported Medical Cases and Toxicology of Platinum and Palladium – REF. NO. EPA-650/1–74–008

Low Winter Dissolved Oxygen in Some Alaskan Rivers – REF. NO. EPA-660/3–74–008

Marine Algal Assay Procedure Bottle Test — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–008

Mathematical Model for Barged Ocean Disposal of Wastes – REF. NO. EPA-660/2–73–029

Mathematical Modeling of Phytoplankton in Lake Ontario — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–005

Mathematical Simulation of Atmospheric Photochemical Reactions: Model Development, Validation, and Application – REF.NO. EPA -650/4–74–011

Mathematical Simulation of Smog Chamber Photo-Chemical Experiments – REF. NO. EPA-650/4–74–040

Measures of Effectiveness for Refuse Storage, Collection, and Transportation Practices – REF. NO. EPA-670/2–74–082

Measuring External Effects of Solid Waste Management – REF. NO. EPA-600/5–75–010

Mercury in the Aquatic Systems: Metholation, OxidationReduction; in Bio Accumulation – REF. NO. EPA-660/3–74–021

Mesoscale Windfield Analysis of Los Angeles Basin – REF. NO. EPA-650/4–73–001

Metallurgical Upgrading of Automotive Scrap Steel – REF. NO. EPA-670/2–73–091

Meteorological Episodes of Slowest Dilution in Contiguous United States – REF. NO. EPA-650/4–74–002

Methodology for Treating Large Localized Emissions of Reactive Pollutants – REF. NO. EPA-650/4–74–006

Methods for Acute Toxicity Tests with Fish, Macroinvertebrates, and Amphibians — Abstracted 600/9–75–001a — REF.NO. EPA -660/3–75–009

Microbial Degradation and Accumulation of Pesticides in Aquatic Systems – REF. NO. EPA-660/3–75–007

Model Verification – Aircraft Emissions Impact on Air Quality – REF. NO. EPA-650/4–74–049

Modeling Dynamics of Biological and Chemical Components of Aquatic Ecosystems — Abstracted 600/9–75–001a — REF.NO. EPA -660/3–75–012

Modifications to the Executive Computer Program for Steady-State Simulation of Wastewater Treatment Facilities – REF.NO. EPA -670/2–74–066

Molecular Modulation Spectrometry for Observation of Free Radicals – REF. NO. EPA-650/4–74–004

Municipal Waste Disposal by Shipborne Incineration and Sea-Disposal of Residues – REF. NO. EPA-670/2–73–017

Negatively Buoyant Jets in a Cross Flow – REF. NO. EPA-660/2–73–012

Nitrite-Accelerated Photochemical Degradation of Cellulose as a Pretreatment for Microbiological Conversion to Protein – REF.NO. EPA -670/2–73–052

Nitrogen Sources and Cycling in Natural Waters – REF. NO. EPA-660/3–73–002

Nutrient Inactivation As A Lake Restoration Procedure — I. Laboratory Investigations – REF. NO. EPA-660/3–74–032

NO2 Actinometer for Field Use – REF. NO. EPA-650/4–74–036

NTA and Mercury in Artificial Stream Systems – REF. NO. EPA-660/3–73–025

Optimization of Air Pollution Measurement Locations – REF. NO. EPA-650/4–75–005

Organic Compounds Entering Groundwater from a Landfill – REF. NO. EPA-660/2–74–077

Organic Nutrient Factors Effecting Algal Growths – REF. NO. EPA-660/3–73–003

Oxidation of Organic Matter in Sediments – REF. NO. EPA-660/3–73–005

Pesticides in the Illinois Waters of Lake Michigan – REF. NO. EPA-660/3–74–002

Petroleum Weathering: Some Pathways, Fate and Disposition on Marine Waters – REF. NO. EPA-660/3–73–013

Pharmacokinetics of Toxic Elements in Rainbow Trout – REF. NO. EPA-660/3–74–027

Phosphorus Uptake and Release by Lake Ontario Sediments — Abstracted 600/9–75–001a — REF. NO. EPA-660/3–75–006

Physical, Chemical and Microbiological Methods of Solid Waste Testing – REF. NO. EPA-670/2–73–001

Physical, Chemical and Microbiological Methods of Solid Waste Testing: Four Additional Procedures – REF. NO. EPA-670/2–74–007

Phytoplankton Composition and Abundance in Lake Ontario During IFYGL — Abstracted 600/9–75–001a — REF.NO. EPA -660/3–75–004

Plume Temperature Measurements of Shallow Submerged Model Discharges With Current – REF. NO. EPA-660/2–73–001

Pneumo-Slurry Pipeline Collection and Removal of Municipal Solid Waste – REF. NO. EPA-670/2–73–072

Pollution Effects on Adult Steelhead Migration in the Snake River – REF. NO. EPA-660/3–73–017

Poultry Manure Disposal by Plow-Furrow-Cover – REF. NO. EPA-670/2–73–085

Precipitation Scavenging of Inorganic Pollutants from Metropolitan Sources – REF. NO. EPA-650/3–74–005

# CURRENT PROGRAM AREA INDEX

## ECOLOGICAL PROCESSES AND EFFECTS

Preliminary Assessment of Wet Systems for Residential Refuse Collection – REF. NO. EPA-670/2–74–065
Preliminary Design of a Household Refuse Grinder – REF. NO. EPA-670/2–74–020
Preparation and Evaluation of Activated Carbon Produced from Municipal Refuse – REF. NO. EPA-670/2–73–010
Preventing Landfill Leachate Contamination of Water – REF. NO. EPA-670/2–73–021
Problems and Opportunities in Management of Combustible Solid Wastes – REF. NO. EPA-670/2–73–056
Proceedings of the Solvent Reactivity Conference – REF. NO. EPA-650/3–74–010
Proceedings of Symposium on Statistical Aspects of Air Quality – REF. NO. EPA-650/4–74–038
Promising Technologies for Treating Hazardous Waste – REF. NO. EPA-670/2–74–088
Protocol for Evaluating the Nitrogen Status of Lake Sediments – REF. NO. EPA-660/3–73–024
Public Attitudes Toward Hazardous Waste Disposal Facilities – REF. NO. EPA-670/2–73–086
Puget Sound Oceanographic Field Studies Data Report, Everett, BELLINGHAM, Port Angeles, 1962–63 – REF. NO. EPA-660/3–73–014
Pyrolysis of Solid Municipal Wastes – REF. NO. EPA-670/2–73–039
Radiolytic Hydrolysis of Cellulose – REF. NO. EPA-670/2–73–030
Raw Materials Transportation Costs and Their Influence on the Use of Wastepaper and Scrap Iron and Steel, Volume I – Technical Discussion – REF. NO. EPA-670/2–74–024A
Raw Materials Transportation Costs and Their Influence on the Use of Wastepaper and Scrap Iron and Steel, Volume II – Appendices – REF. NO. EPA-670/2–74–024B
Recirculating Waste System for Swine Units – REF. NO. EPA-670/2–73–025
Reclamation of Energy from Organic Waste – REF. NO. EPA-670/2–74–016
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume I – Summary Report – REF. NO. EPA-670/2–73–053A
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume II – Toxicologic Summary – REF. NO. EPA-670/2–73–053B
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume III – Disposal Process Discriptions: Ultimate Disposal Incineration, and Pyrolysis Processes – REF. NO. EPA-670/2–73–053C
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume IV – Disposal Process Descriptions: Biological and Miscellaneous Waste Treatment Processes – REF. NO. EPA-670/2–73–053D
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume V – National Disposal Site Candidate Waste Stream Constituent Profile Reports – Pesticides and Cyanide Compounds – REF. NO. EPA-670/2–73–053E
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VI – National Disposal Site Candidate Waste Stream Constituent Profile Report – Mercury, Arsenic, Chromium and Cadmium Compounds – REF.NO. EPA -670/2–73–053F
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VII – National Disposal Site Candidate Waste Stream Constituent Profile Report – Propellants, Explosives, and Chemical Warfare Material – REF.NO. EPA -670/2–73–053G
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume VIII – National Disposal Site Candidate Waste Stream Constituent Profile Report – Miscellaneous Inorganic and Organic Compounds – REF.NO. EPA -670/2–73–053H
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume IX – National Disposal Site Candidate Waste Stream Constituent Profile Report – Radioactive Materials – REF. NO. EPA-670/2–73–053I
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume X – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Organic Compounds – REF. NO. EPA-670/2–73–053J
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XI – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Organic Compounds – REF. NO. EPA-670/2–73–053K
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XII – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Inorganic Compounds – REF. NO. EPA-670/2–73–053L
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XIII – Industrial and Municipal Disposal Candidate Waste Stream Constituent Profile Reports – Inorganic Compounds – REF. NO. EPA-670/2–73–053M
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XIV – Summary of Waste Origins, Forms and Quantities – REF. NO. EPA-670/2–73–053N
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XV – Research and Development Plans – REF. NO. EPA-670/2–73–053O
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume XVI – References – REF.NO. EPA -670/2–73–053P
Recommended Methods of Reduction, Neutralization, Recovery or Disposal of Hazardous Waste, Volume I thru Volume XVI – REF.NO. EPA -670/2–73–053A-P
Relationship Between Circumsolar Sky Brightness and Atmospheric Aerosols – REF. NO. EPA-650/4–75–012
Research and Development of a Selective Algaecide to Control Nuisance Algal Growth-Phase III – REF. NO. EPA-660/3–74–019
Review of the Physiological Impact of Mercurials – REF. NO. EPA-660/3–73–022
Reviewing Environmental Impact Statements – Power Plant Cooling Systems, Engineering Aspects – REF. NO. EPA-660/2–73–016

# CURRENT PROGRAM AREA INDEX

## ECOLOGICAL PROCESSES AND EFFECTS

Role of Solid-Gas Interactions in Air Pollution – REF. NO. EPA-650/3-74-007
Routing of Solid Waste Collection Vehicles, Final Report: Appendix A – Manual for Use of the Computer Codes — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-74-036a
Routing of Solid Waste Collection Vehicles: Appendix B – A Heuristic Solution to the M-Postmen's Problem — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-74-036b
Saline Groundwater Produced with Oil and Gas – REF. NO. EPA-660/2-74-010
Salt Water Detection in the Cimarron Terrace, Oklahoma — Abstracted 600/9-75-001a — REF. NO. EPA-660/3-74-033
Scrap Rubber Tire Utilization in Road Dressings – REF. NO. EPA-670/2-74-014
Second Annotated Bibliography on Biological Effects of Metals in Aquatic Environments – REF. NO. EPA-660/3-75-023
Sediments and Sediment-Water Nutrient Interchanges in Upper Klamath Lake, Oregon – REF. NO. EPA-660/3-74-015
Select Research Group in Air Pollution Meteorology, Second Annual Progress Report Volume I – REF. NO. EPA-650/4-74-045a
Select Research Group in Air Pollution Meteorology, Second Annual Progress Report Volume II – REF. NO. EPA-650/4-74-045b
Significance and Control of Waste Water Floatables in Coastal Waters – REF. NO. EPA-660/3-74-016
Silt Removal From a Lake Bottom — Abstracted 600/9-75-001a — REF. NO. EPA-660/3-74-017
Single-Cell Protein From Waste Cellulose – REF. NO. EPA-670/2-73-095
Solid Waste Conversion: Cellulose Liquefaction — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-75-031
Sources and Natural Removal Processes for Some Atmospheric Pollutants – REF. NO. EPA-650/4-74-032
Specifications for Materials Recovered from Municipal Refuse – REF. NO. EPA-670/2-75-034
Spectroscopic Study of California Smog – REF. NO. EPA-650/4-75-006
Statistical Prediction of Equilibrium Temperature From Standard Meteorological Data Bases – REF. NO. EPA-660/2-73-003
Statistical Questions Relating to the Validation of Air Quality Simulation Models – REF. NO. EPA-650/4-75-010
Structure and Reactivity of Adsorbed Oxides of Sulfur – REF. NO. EPA-650/3-74-006
Studies of Pollutant Concentration Frequency Distributions – REF. NO. EPA-650/4-75-004
Studies on Effects of Thermal Pollution in Biscayne Bay in Florida – REF. NO. EPA-660/3-74-014
Studies on Modifications of Solid Industrial Wastes – REF. NO. EPA-670/2-73-065
Studies on Southeastern Aquatic Insects – REF. NO. EPA-660/3-73-016
Studies to Determine Methods for Culturing Three Freshwater Zooplankton Species — Abstracted 600/9-75-001a — REF.NO. EPA -660/3-75-010
Study of Corrosion in Municipal Incinerators Versus Refuse Composition — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-74-084
Study of Factors Affecting Reactions in Environmental Chambers Final Report on Phase II – REF. NO. EPA-650/3-74-004a
Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume I – REF. NO. EPA-670/2-73-014
Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume II – REF. NO. EPA-670/2-73-015
Study of Hazardous Waste Materials, Hazardous Effects and Disposal Methods, Volume III – REF. NO. EPA-670/2-73-016
Study of Incinerator Residue Analysis of Water Soluble Components – REF. NO. EPA-670/2-73-057
Study of Institutional Solid Wastes – REF. NO. EPA-670/2-73-083
Study on Technical and Economic Feasibility of a Hydrogenation Process for Utilization of Waste Rubber – REF. NO. EPA-670/2-73-066
Subsurface Biological Activity in Relation to Ground Water Pollution – REF. NO. EPA-660/2-73-014
Sulfur Content of Douglas Fir Foliage Near a Paper Mill – REF. NO. EPA-660/3-74-018
Survival of Pathogens in Animal Manure Disposal – REF. NO. EPA-670/2-73-051
Temperature Effects on Eggs and Fry of Percoid Fishes – REF. NO. EPA-660/3-75-017
Theoretical Model and Solubility Characteristics of Aroclor R 1254 in Water: Problems Associated with Low-Solubility Compounds in Aquatic Toxicity Test — Abstracted 600/9-75-001a — REF. NO. EPA-660/3-74-013
Thermophilic Aerobic Digestion of Organic Solid Wastes – REF. NO. EPA-670/2-73-061
Toxicity of Selected Pesticides to the Bay Mussel (Mytilus edulis) – REF. NO. EPA-660/3-75-016
Travels of Airborne Pollen – REF. NO. EPA-650/3-75-003
Turbulent Diffusion in Liquid Jets: Final Report – REF. NO. EPA-660/3-74-004b
Turbulent Diffusion in Liquid Jets: Part I – REF. NO. EPA-660/3-74-004a
Urban Street Cleaning — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-75-030
Use of Domestic Waste Glass for Urban Paving – REF. NO. EPA-670/2-73-038
Use of Domestic Waste Glass for Urban Paving – Summary Report – REF. NO. EPA-670/2-75-053
User's Guide for Hiway, A Highway Air Pollution – REF. NO. EPA-650/4-74-008
User's Manual for the APRAC-1A Urban Diffusion Model Computer Program – REF. NO. EPA-650/3-73-001
Utilization of Bark Waste – REF. NO. EPA-670/2-73-005
Utilization of Fibrous Wastes as Sources of Nutrients – REF. NO. EPA-670/2-73-090
Water Quality Requirements of Aquatic Insects – REF. NO. EPA-660/3-73-004
Weed Harvest and Lake Nutrient Dynamics – REF. NO. EPA-660/3-73-001
Wet Systems for Residential Refuse Collection: A Case Study for Springfield, Massachusetts – REF. NO. EPA-670/2-74-038
Wind Tunnel Tests of Negatively Buoyant Plumes – REF. NO. EPA-650/3-74-003
Wood Waste Reuse in Controlled Release Pesticides – REF. NO. EPA-670/2-73-034
Zooplankton Production in Lake Ontario as Influenced by Environmental Perturbations – REF. NO. EPA-660/3-75-021

# CURRENT PROGRAM AREA INDEX

## MUNICIPAL POLLUTION CONTROL

MUNICIPAL POLLUTION CONTROL

Activated Silica in Wastewater Coagulation – REF. NO. EPA-670/2–74–047
Activated Sludge Process Using Pure Oxygen – REF. NO. EPA-670/2–73–042
Activated Sludge Treatment Systems With Oxygen – REF. NO. EPA-670/2–73–073
Adsorption from Aqueous Solution – REF. NO. EPA-670/2–74–012
Advanced Automatic Control Strategies for the Activated Sludge Treatment Process – REF. NO. EPA-670/2–75–039
Alum Addition to Activated Sludge With Tertiary Solids Removal – REF. NO. EPA-670/2–73–037
Ammonia Nitrogen Removal By Breakpoint Chlorination – REF. NO. EPA-670/2–73–058
Assessment and Development Plan for Monitoring of Organics in Storm Flows — Abstracted 600/9–75–001e — REF.NO. EPA -670/2–74–087
Bacterial Zoogloea Formation – REF. NO. EPA-670/2–74–018
Batch Disinfection of Treated Wastewater With Chlorine at Less Than 1 Degree C – REF. NO. EPA-660/2–73–005
Bench-Scale High-Rate Disinfection of Combined Sewer Overflows With Chlorine and Chlorine Dioxide – REF. NO. EPA-670/2–75–021
Biological Treatment of Combined Sewer Overflow at Kenosha, Wisconsin – REF. NO. EPA-670/2–75–019
BOD, Solids and Nutrient Removal By Foam Flotation – REF. NO. EPA-670/2–73–096
Carbon, Nitrogen, and Phosphorus Removal in Staged NitrificationDenitrification Treatment – REF. NO. EPA-670/2–75–052
Characterization and Treatment of Combined Sewer Overflows – REF. NO. EPA-670/2–75–054
Characterization and Treatment of Urban Land Runoff — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–096
Chemical Impact of Snow Dumping Practices – REF. NO. EPA-670/2–74–086
Combined Sewer Overflow Seminar Papers – REF. NO. EPA-670/2–73–077
Combined Sewer Overflow Treatment by the Rotating Biological Contactor Process – REF. NO. EPA-670/2–74–050
Computer Management of a Combined Sewer System – REF. NO. EPA-670/2–74–022
Conference on Recycling Treated Municipal Wastewater Through Forest and Cropland – REF. NO. EPA-660/2–74–003
Contributions of Urban Roadway Usage to Water Pollution – REF. NO. EPA-600/2–75–004
Control Schemes for the Activated-Sludge Process – REF. NO. EPA-670/2–74–069
Controlling Sulfides in Sanitary Sewers Using Air and Oxygen – REF. NO. EPA-670/2–75–060
Cost of Dissolved Air Flotation Thickening of Waste Activated Sludge at Municipal Sewage Treatment Plants – REF.NO. EPA -670/2–74–011
Cost-Effective Design Based Upon Field Derived Parameters – REF. NO. EPA-670/2–74–062
Costs of Filter Pressing Domestic Sewage Sludges – REF. NO. EPA-670/2–74–006
Costs of Hauling and Land Spreading of Domestic Sewage Treatment Plant Sludge – REF. NO. EPA-670/2–74–010
Countermeasures for Pollution From Overflow – The State of the Art — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–74–090
Demonstrated Technology and Research Needs for Reuse of Municipal Wastewater – REF. NO. EPA-670/2–75–038
Demonstration of a High-Rate Activated Sludge System – REF. NO. EPA-670/2–75–037
Demonstration of Waste Flow Reduction from Households – REF. NO. EPA-670/2–74–071
Design and Simulation of Equalization Basins – REF. NO. EPA-670/2–73–046
Development of a Monthly Technology Bulletin – REF. NO. EPA-600/2–74–005
Development of Phosphate – Free Heavy Duty Detergents – REF. NO. EPA-600/2–74–003
Disinfection of Sewage Effluents – REF. NO. EPA-670/2–73–029
Dual Functioning Swirl Combined Sewer Overflow Regulator/ Concentrator – REF. NO. EPA-670/2–73–059
Effect of Carbon to Nitrogen Ratio on Activated Sludge Subsidence and Dewatering Characteristics – REF. NO. EPA-670/2–74–025
Electrochemical Carbon Regeneration – REF. NO. EPA-670/2–75–028
Enhancing Trickling Filter Plant Performance By Chemical Precipitation – REF. NO. EPA-670/2–73–060
Evaluation and Demonstration of the Capillary Suction Sludge Dewatering Device – REF. NO. EPA-670/2–74–017
Evaluation of the Bio-Disc Treatment Process for Summer Camp Application – REF. NO. EPA-670/2–73–022
Evaluation of Three Combined Sewage Overflow Treatment Alternatives — Abstracted 600/9–75–001e — REF. NO. EPA-670/2–74–079
Extended Aeration Sewage Treatment in Cold Climate — Abstracted 600/9–75–001a — REF. NO. EPA-660/2–74–070
Fate and Effects of Trace Elements in Sewage Sludge When Applied to Agricultural Lands: A Literature Review Study – REF.NO. EPA -670/2–74–005
Feasibility of Overflow Overland Flow Treatment of Feedlot Runoff – REF. NO. EPA-660/2–74–062
Feasibility of Overland Flow for Treatment of Raw Domestic Wastewater – REF. NO. EPA-660/2–74–087
Ferric Chloride and Organic Polyelectrolytes for the Removal of Phosphorus – REF. NO. EPA-670/2–73–103
Great Lakes Water Quality — Status of Pertinent EPA Research — Abstracted 600/9–75–001a — REF. NO. EPA-660/9–74–002
Hydrogen Peroxide Cures Filamentous Growth in Activated Sludge – REF. NO. EPA-670/2–73–033
Hypochlorination of Pollution Stormwater Pumpage at New Orleans – REF. NO. EPA-670/2–73–067
Hypolimnetic Flow Regimes in Lakes and Impoundments – REF. NO. EPA-660/2–74–053
Hypolimnion Aeration With Commercial Oxygen – Volume I – Dynamics of Bubble Plume – REF. NO. EPA-660/2–73–025a
Hypolimnion Aeration With Commercial Oxygen – Volume II – Bubble Plume Gas Transfer – REF. NO. EPA-660/2–73–025b
Instream Aeration to Control Dissolved Sulfide in Sanitary Sewers – REF. NO. EPA-670/2–73–024
Interim Report of Task Force on Phosphate Removal Sludges — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–013
Laboratory Ozonation of Municipal Wastewater – REF. NO. EPA-670/2–73–075

# CURRENT PROGRAM AREA INDEX

## MUNICIPAL POLLUTION CONTROL

Land Application of Sludge Effluent and Sludges: Selected Abstracts – REF. NO. EPA-660/2–74–042
Lime Disinfection of Sewage Bacteria at Low Temperature – REF. NO. EPA-660/2–73–017
Lime Stabilized Sludge: Its Stability and Effect on Agricultural Land — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–012
Manual for Deicer Chemical Application Practices – REF. NO. EPA-670/2–74–045
Manual for Deicing Chemical Storage and Handling – REF. NO. EPA-670/2–74–033
Mathematical Model for Aerobic Digestion – REF. NO. EPA-670/2–73–045
Mathematical Model for Post Aeration – REF. NO. EPA-670/2–73–044
Methods for Improvement of Trickling Filter Plant Performance, Part I – Mechanical and Biological Optima – REF.NO. EPA -670/2–73–047a
Microbiology of Sewage Sludge Disposal in Soil – REF. NO. EPA-670/2–74–074
Microstraining and Disinfection of Combined Sewer Overflows – Phase III – REF. NO. EPA-670/2–74–049
Multi-Purpose Combined Sewer Overflow Treatment Facility, Mount Clemens, Michigan – REF. NO. EPA-670/2–75–010
Municipal Water Pollution Control Abstracts for 1974 – REF. NO. EPA-600/2–75–005
New Microbial Indicators of Wastewater Chlorination Efficiency – REF. NO. EPA-670/2–73–082
Nitrate and Nitrite Volatilization By Microorganisms in Laboratory Experiments – REF. NO. EPA-660/2–73–002
Nitrogen Removal By Ammonia Stripping – REF. NO. EPA-670/2–73–040
Odors Emitted From Raw and Digested Sewage Sludge – REF. NO. EPA-670/2–73–098
Off-the-Shelf Analyzers for Measuring Adenosine Triphosphate (ATP) in Activated Sludge – REF. NO. EPA-670/2–74–034
On-Line Colorimetric Analyzers for Monitoring Nitrate-Nitrite, Ammonia, Orthophosphorus and Total Hydrolyzable Phosphorusin Wastewater-Treatment Process Streams – REF. NO. EPA-670/2–74–046
Optimization and Design of an Oil/Activated Sludge Concentration Process – REF. NO. EPA-670/2–74–004
Oxygenation of Aqueous Bodies Using Liquid Oxygen-Loxination – REF. NO. EPA-670/2–74–048
Phosphate Removal in an Activated Sludge Facility – REF. NO. EPA-670/2–74–061
Physical – Chemical Treatment of Raw Material Wastewater – REF. NO. EPA-670/2–73–070
Physical and Setling Characteristics of Particulates in Storm and Sanitary Wastewaters – REF. NO. EPA-670/2–75–011
Pilot – Demonstration Project for Industrial Reuse of Renovated Municipal Wastewater – REF. NO. EPA-670/2–73–064
Planned Maintenance Management System for Municipal Wastewater Treatment Plants – REF. NO. EPA-600/2–73–004
Portable Device for Measuring Wastewater Flow in Sewers – REF. NO. EPA-600/2–73–002
Rainfall-Runoff Relations on Urban and Rural Areas – REF. NO. EPA-670/2–75–046
Relationship Between Diameter and Height for the Design of a Swirl Concentrator as a Combined Sewer Overflow Regulator – REF.NO. EPA -670/2–74–039
Renovation of Secondary Effluent for Re-use as a Water Resource – REF. NO. EPA-660/2–74–016
Replacement of Activated Sludge Secondary Clarifiers by Dynamic Straining – REF. NO. EPA-670/2–75–045
Reverse Osmosis of Treated and Untreated Secondary Sewage Effluent – REF. NO. EPA-670/2–74–077
Reverse Osmosis of Treated and Untreated Secondary Sewage Effluent; Appendix A-2 and Appendix A-6 — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–027
Review of Landspreading of Liquid Municipal Sewage Sludge – REF. NO. EPA-670/2–75–049
Role of Polyelectrolytes in Filtration Processes – REF. NO. EPA-670/2–74–032
Role of Trace Elements in Management of Nuisance Growths — Abstracted 600/9–75–001a — REF. NO. EPA-660/2–75–008
Rotating Biological Disk Wastewater Treatment Process – Pilot Plant Evaluation – REF. NO. EPA-670/2–73–027
Second U.S. – Japan Conference on Sewage Treatment Technology December 1–6, 1972 – REF. NO. EPA-670/9–74–003
Selected Abstracts for Instrumentation and Automation of Wastewater Facilities – REF. NO. EPA-670/2–73–104
Selective Nutrient Removal Secondary Effluent – REF. NO. EPA-670/2–73–076
Sewerage System Monitoring and Remote Control – REF. NO. EPA-670/2–75–020
Single-Stage Nitrification-Denitrification – REF. NO. EPA-670/2–75–051
Sludge Conditioning Using SO2 and Low Pressure for Production of Organic Feed Concentrate – REF. NO. EPA-670/2–73–062
Storm Water Management Model: Dissemination and User Assistance – REF. NO. EPA-670/2–75–041
Storm Water Management Model: User's Manual – Version II — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–017
Stream Pollution Abatement by Supplement Pumping — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–035
Study of an Integrated Power, Water and Wastewater Utility Complex – REF. NO. EPA-670/2–74–080
Study of Upflow Filter for Tertiary Treatment – REF. NO. EPA-670/2–73–074
Summary Report – Pilot Plant Studies on Dewatering Primary Digested Sludge – REF. NO. EPA-670/2–73–043
Surge Facility for Wet and Dry Weather Flow Control – REF. NO. EPA-670/2–74–075
Suspended Solids Monitor — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–002
System Alternatives in Oxygen Activated Sludge — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–008
SWIRL Concentrator as a Grit Separator Device – REF. NO. EPA-670/2–74–026
Tertiary Treatment With a Controlled Ecological System – REF. NO. EPA-660/2–73–022
U-Tube Aeration – REF. NO. EPA-670/2–73–031
Upgrading Wastewater Stabilization Ponds to Meet New Discharge Standards — Abstracted 600/9–75–001a — REF.NO. EPA -670/9–75–004
Urban Stormwater Management and Technology: An Assessment – REF. NO. EPA-670/2–74–040
Urban Stormwater Management Modeling and Decision-Making – REF. NO. EPA-670/2–75–022

# CURRENT PROGRAM AREA INDEX

## MUNICIPAL POLLUTION CONTROL

Utilization of Trickling Filters for Dual Treatment of Dry and Wet Weather Flows – REF. NO. EPA-670/2-73-071
Wastewater Treatment and Reuse By Land Application, Volume I – Summary – REF. NO. EPA-660/2-73-006a
Wastewater Treatment and Reuse By Land Application, Volume II – Summary – REF. NO. EPA-660/2-73-006b
Wastewater Use in the Production of Food and Fiber—Proceedings of Conference held at Oklahoma City, OK March 5-7, 1974 – REF. NO. EPA-660/2-74-041
Water Quality Effect of Diking a Shallow Arid-Region Lake — Abstracted 600/9-75-001a — REF. NO. EPA-660/2-75-007
Water Renovation of Municipal Effluents by Reverse Osmosis — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-75-009
200 MGD Activated Sludge Plant Removes Phosphorus by Pickle Liquor – REF. NO. EPA-670/2-73-050

## INDUSTRIAL POLLUTION CONTROL

Activated Carbon Treatment of Unbleached Kraft Effluent for Reuse — Abstracted 600/9-75-001a — REF. NO. EPA-660/2-75-004
Activated Sludge – Bio-Disc Treatment of Distillery Wastewater – REF. NO. EPA-660/2-74-014
Air Flotation – Biological Oxidation of Synthetic Rubber and Latex Wastewater – REF. NO. EPA-660/2-73-018
Biological Treatment of Concentrated Sugar Beet Wastes – REF. NO. EPA-660/2-74-028
Catalyzed Bio-Oxidation and Tertiary Treatment of Integrated Textile Wastewaters – REF. NO. EPA-660/2-74-039
Characterization of Waste Waters from the Ethical Pharmaceutical Industry – REF. NO. EPA-670/2-74-057
Chemical/Physical and Biological Treatment of Wool Processing Wastes – REF. NO. EPA-660/2-73-036
Coliform Bacteria Growth and Control in Aerated Stabilization Basins – REF. NO. EPA-660/2-73-028
Color Characterization Before and After Lime Treatment – REF. NO. EPA-660/2-74-029
Color Removal and Sludge Disposal Process for Kraft Mill Effluents – REF. NO. EPA-660/2-74-008
Color Removal From Kraft Mill Effluents By Ultrafiltration – REF. NO. EPA-660/2-73-019
Continuous Inplant Hot Gas Blanching of Vegetables – REF. NO. EPA-660/2-74-091
Copper Recovery from Brass Mill Discharge by Cementation with Scrap Iron — Abstracted 600/9-75-001a — REF.NO. EPA -670/2-75-029
Demonstration of Thermal Water Utilization in Agriculture – REF. NO. EPA-660/2-74-011
Development of a Monthly Industrial Technology Bulletin – REF. NO. EPA-600/2-74-007
Disposal and Utilization of Waste Kiln Dust From Cement Industry – REF. NO. EPA-670/2-75-043
Dry Caustic Heating of Clingstone Peaches on a Commercial Scale – REF. NO. EPA-660/2-74-092
Evaluation of Polymeric Clarification of Meat-Packing and Domestic Wastewaters – REF. NO. EPA-660/2-74-020
Explicit Calibration of the Pills II System – REF. NO. EPA-660/2-73-011
Final Report Deep Water Pilot Plant Treatability Study – REF. NO. EPA-660/2-73-038
Granite Industry Wastewater Treatment – REF. NO. EPA-660/2-74-040
Improvement of Treatment of Food Industry Waste – REF. NO. EPA-660/2-74-035
Industrial Water Softener Waste Brine Reclamation – REF. NO. EPA-660/2-74-007
Information Resource: Final Report Water Pollution Control in Water Utilities – REF. NO. EPA-660/2-73-020
Infrared Dry Caustic vs. Wet Caustic Peeling of White Potatoes – REF. NO. EPA-660/2-74-088
Ion Exchange Process for Recovery of Chromate from Pigment Manufacturing – REF. NO. EPA-670/2-74-044
Laboratory Study of Continous Electro-oxidation of Dilute Cuanide Waste – REF. NO. EPA-670/2-74-059
Measurement of Residual Chlorine Levels in Cooling Water — Amperometric Method – REF. NO. EPA-660/2-73-039
Mercury Recovery from Contaminated Waste Waters and Sludges – REF. NO. EPA-660/2-74-086
Metallic Recovery From Waste Waters Utilizing Cementation – REF. NO. EPA-670/2-74-008
Modular Wastewater Treatment System Demonstration For the Textile Maintenance Industry – REF. NO. EPA-660/2-73-037
New Membranes for Reverse Osmosis Treatment of Metal Finishing Effluents – REF. NO. EPA-660/2-73-033
Nomographs for Thermal Pollution Control Systems – REF. NO. EPA-660/2-73-004
Paunch Manure as a Feed Supplement in Channel Catfish Farming – REF. NO. EPA-660/2-74-046
Physical-Chemical Treatment of Municipal Wastes by Recycled Magnesium Carbonate – REF. NO. EPA-660/2-74-055
Pilot Plant Optimization of Phosphoric Acid Recovery Process – REF. NO. EPA-670/2-75-015
Pilot Scale Treatment of Wine Stillage — Abstracted 600/9-75-001a — REF. NO. EPA-660/2-75-002
Plant Scale Studies of the Magnesium Carbonate Water Treatment Process – REF. NO. EPA-660/2-75-006
Pollution Control Technology for Pesticide Formulators and Packagers — Abstracted 600/9-75-001a — REF. NO. EPA-660/2-74-094
Poultry Processing Wastewater Treatment and Reuses – REF. NO. EPA-660/2-74-060
Proceedings Fourth National Symposium on Food Processing Wastes – REF. NO. EPA-660/2-73-031
Proceedings: Fifth National Symposium on Food Processing Wastes – REF. NO. EPA-660/2-74-058
Process and Environmental Technology for Producing SNG and Liquid Fuels – REF. NO. EPA-660/2-75-011
Projects in the Industrial Pollution Control Division – December 1974 — Abstracted 600/9-75-001a — REF. NO. EPA-600/2-75-001
Protein Production from Acid Whey VIA Fermentation – REF. NO. EPA-660/2-74-025
Reclamation of Metal Values from Metal-Finishing Waste Treatment Sludges – REF. NO. EPA-670/2-75-018
Reclamation of Sulfuric Acid From Waste Streams – REF. NO. EPA-670/2-75-016
Recovery of Fatty Materials From Edible Oil Refinery Effluents – REF. NO. EPA-660/2-73-015
Regeneration of Chromated Aluminum Deoxidizers – REF. NO. EPA-660/2-73-023

# CURRENT PROGRAM AREA INDEX

## INDUSTRIAL POLLUTION CONTROL

Removal of Chromium from Plating Rinse Water Using Activated Carbon – REF. NO. EPA-670/2-75-055
Research Study of Coal Preparation Plant and By-Product Coke Plant Effluents – REF. NO. EPA-660/2-74-050
Rum Distillery Slops Treatment by Anaerobic Contact Process – REF. NO. EPA-660/2-74-074
Separation, Dewatering, and Disposal of Sugar Beet Transport Water Solids Phase I – REF. NO. EPA-660/2-74-093
Shrimp Canning Waste Treatment Study – REF. NO. EPA-660/2-74-061
State-of-The-Art For The Inorganic Chemicals Industry: Commercial Explosives — Abstracted 600/9-75-001a — REF.NO EPA -600/2-74-009b
State-of-The-Art For The Inorganic Chemicals Industry: Industrial Inorganic Gases — Abstracted 600/9-75-001a — REF.NO EPA -600/2-74-009c
State-of-The-Art For The Inorganic Chemicals Industry: Inorganic Pesticides — Abstracted 600/9-75-001a — REF.NO. EPA -600/2-74-009a
Studies of Low Molecular Weight Lignin Sulfonates – REF. NO. EPA-660/2-74-069
Study of Feasibility of Herbicide Orange Chlorinolysis – REF. NO. EPA-600/2-74-008
Submerged Combustion Evaporator for Concentration of Brewery Spent Grain Liquor – REF. NO. EPA-660/2-74-059
Sulfuric Acid and Ferrous Sulfate Recovery From Waste Pickle Liquor – REF. NO. EPA-660/2-73-032
Technical and Economic Evaluation of Cooling Systems Blowdown Control Techniques – REF. NO. EPA-660/2-73-026
Test Method for Volatile Component Stripping of Wastewater – REF. NO. EPA-660/2-74-044
Treatment and Recovery of Fluoride Industrial Waste – REF. NO. EPA-660/2-73-024
Treatment of Cheese Processing Wastewaters in Aerated Lagoons – REF. NO. EPA-660/2-74-012
Treatment of Domestic Wastewater and NSSC Pulp and Paper Mill Wastes – REF. NO. EPA-660/2-73-010
Treatment of Packing House Waste by Anaerobic Lagoons in Plastic-Media Filters – REF. NO. EPA-660/2-74-027
Treatment of Sulfite Evaporator Condensates for Recovery of Volatile Components – REF. NO. EPA-660/2-73-030
Waste Citrus Activated Sludge As a Poultry Feed Ingredient — Abstracted 600/9-75-001a — REF. NO. EPA-660/2-75-001
Waste Control and Abatement in the Processing of Sweet Potatoes – REF. NO. EPA-660/2-73-021
Waste Water Treatment and Reuse in a Metal Finishing Job Shop – REF. NO. EPA-670/2-74-042
Wastewater Abatement in Canning Vegetables by IQB Blanching – REF. NO. EPA-660/2-74-006
Wastewater Characterization for the Specialty Food Industry – REF. NO. EPA-660/2-74-075
Water and Waste Management in Poultry Processing – REF. NO. EPA-660/2-74-031
Water Recycle/Reuse Possibilities: Power Plant Boiler and Cooling System – REF. NO. EPA-660/2-74-089
Waterborne Wastes of the Paint and Inorganic Pigments Industries – REF. NO. EPA-670/2-74-030

## NON-POINT POLLUTION CONTROL

Abatement of Mine Drainage Pollution By Underground Precipitation – REF. NO. EPA-670/2-73-092
Anaerobic-Aerobic Lagoon Treatment of Dairy Manure Wastes – REF. NO. EPA-660/2-74-030
Analysis of Emissions from Outboard Two Cycle Marine Engines – REF. NO. EPA-670/2-75-061
Analysis of Pollution from Marine Engines and Effects on the Environment – REF. NO. EPA-670/2-75-062
Analysis of Pollution from Marine Engines and Effects on the Environment – Southern Lakes – REF. NO. EPA-670/2-75-063
Analysis of Pollution from Marine Engines and Effects on the Environment – Summary Report – REF. NO. EPA-670/2-75-064
Analysis of Pollution Control Costs – REF. NO. EPA-670/2-74-009
Applications of Reverse Osmosis to Acid Mine Drainage Treatment – REF. NO. EPA-670/2-73-100
Appraisal of Neutralization Processes to Treat Coal Mine Drainage – REF. NO. EPA-670/2-73-093
Assessing Effects on Water Quality by Boating Activity – REF. NO. EPA-670/2-74-072
Bile on Hydrologic Modifications (HYMOD) – REF. NO. EPA-600/2-75-007b
Brine Disposal Treatment Practices Relating to the Oil Production Industry – REF. NO. EPA-660/2-74-037
Carbonate Bonding of Taconite Tailings – REF. NO. EPA-670/2-74-001
Characterization of Vessel Waste in Duluth-Superior Harbor — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-74-097
Combustion Toilet for Use on Small Boats – REF. NO. EPA-670/2-74-053
Conversion of Cattle Feedlot Wastes to Ammonia Synthesis Gas – REF. NO. EPA-660/2-74-090
Crankcase Drainage from In-Service Out-board Motors — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-74-092
Demonstration of a Non-Aqueous Sewage Disposal System – REF. NO. EPA-670/2-73-088
Demonstration of the Separation and Disposal of Concentrated Sediments – REF. NO. EPA-660/2-74-072
Demonstration of Three Recirculating Swine Waste Management Systems – REF. NO. EPA-660/2-74-009
Design Parameters for Animal Waste Treatment Systems – REF. NO. EPA-660/2-74-063
Development and Evaluation Report: Physical Chemical Marine Sanitation System – REF. NO. EPA-670/2-74-043
Development of Field Applied DDT – REF. NO. EPA-660/2-74-036
Development of On-Shore Treatent System for Sewage from Watercraft Retention System – REF. NO. EPA-670/2-74-056
Devices for On – Board Treatment of Waste from Vessels — Abstracted 600/9-75-001a — REF. NO. EPA-670/2-74-091
Effects of Exhaust from Two-Cycled Outboard Engines – REF. NO. EPA-670/2-74-063
Electrochemical Removal of Heavy Metals from Acid Mine Drainage – REF. NO. EPA-670/2-74-023
Environmental Protection in Surface Mining of Coal – REF. NO. EPA-670/2-74-093

# CURRENT PROGRAM AREA INDEX

## NON-POINT POLLUTION CONTROL

**Evaluation of Drainage for Salinity Control in Grand Valley – REF. NO. EPA-660/2–74–084**

**Evaluation of Irrigation Scheduling for Salinity Control in Grand Valley – REF. NO. EPA-660/2–74–052**

**Evaluation of MTF for Testing Hazardous Material Spill Control Equipment – REF. NO. EPA-670/2–74–073**

**Evaluation of Tailings Ponds Sealants – REF. NO. EPA-660/2–74–065**

**Executive Summary of Three EPA Demonstration Programs in Erosion and Sediment Control – REF. NO. EPA-660/2–74–073**

**Fabric Boom Concept for Containment and Collection of Floating Oil – REF. NO. EPA-670/2–73–069**

**Feasibility of 5 gpm Dynactor/Flash Magnetic Separator System to Treat Spilled Hazardous Materials — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–004**

**Feasibility Study of a New Surface Mining Method "Longwall Stripping" – REF. NO. EPA-670/2–74–002**

**Gas Requirements to Pressurize Abandoned Deep Mines – REF. NO. EPA-670/2–73–054**

**Guidelines for the Disposal of Small Quantities of Unused Pesticide – REF. NO. EPA-670/2–75–057**

**Herbicide Runoff from Four Coastal Plain Soil Types – REF. NO. EPA-660/2–74–017**

**Impact of Hydrologic Modifications on Water Quality – REF. NO. EPA-600/2–75–007a**

**Investigation of Surface Films – Chesapeake Bay Entrance – REF. NO. EPA-670/2–73–099**

**Joint Construction Sediment Control Project – REF. NO. EPA-660/2–73–035**

**Laboratory Study of Self-Sealing Limestone Plugs for Mine Openings – REF. NO. EPA-670/2–73–081**

**Limestone and Limestone-Lime Neutralization of Acid Mine Drainage – REF. NO. EPA-670/2–74–051**

**Liquid Aerobic Composting of Cattle Wastes and Evaluation of Byproducts – REF. NO. EPA-660/2–74–034**

**Livestock and the Environment – A Bibliography with Abstracts – REF. NO. EPA-660/2–74–024**

**Livestock and the Environment—A Bibliography with Abstracts, Volume II — Abstracted 600/9–75–001a — REF.NO.** EPA -660/2–75–003

**Losses of Fertilizers and Pesticides from Claypan Soils – REF. NO. EPA-660/2–74–068**

**Management Practices Affecting Quality and Quantity of Irrigation Return Flow — Abstracted 600/9–75–001a — REF.NO.** EPA -660/2–75–005

**Methods to Treat, Control and Monitor Spilled Hazardous Materials – REF. NO. EPA-670/2–75–042**

**Mine Drainage Pollution Control Demonstration Grant Procedures and Requirement — Abstracted 600/9–75–001a — REF.NO.** EPA -670/2–74–003

**Mine Spoil Potentials for Soil and Water Quality – REF. NO. EPA-670/2–74–070**

**Nitrogen and Phosphorus Losses from Agronomy Plots in North Alabama – REF. NO. EPA-660/2–74–033**

**North Fork Alluvial Decontamination Project, Hubbard Creek Reservoir Watershed – REF. NO. EPA-660/2–74–019**

**Odors from Confined Livestock Production – A State of the Art – REF. NO. EPA-660/2–74–023**

**Oil Recovery System Using Sorbent Material – REF. NO. EPA-670/2–73–068**

**Oil Recovery System Utilizing Polyurethane Foam—A Feasibility Study – REF. NO. EPA-670/2–73–084**

**Oil Spill and Oil Pollution Reports — Abstracted 600/9–75–001a — REF. NO. EPA-670/2–75–003**

**Oil Spill and Oil Pollution Reports – November 1974 – February 1975 – REF. NO. EPA-670/2–75–044**

**Oil Spill and Oil Pollution Reports, February 1975 – April 1975 – REF. NO. EPA-670/2–75–059**

**On-Shore Treatment Systems for Sewerage from Watercraft Retention Systems — Abstracted 600/9–75–001a — REF.NO.** EPA -670/2–75–007

**Pesticide Movement from Crop Lands into Lake Erie – REF. NO. EPA-660/2–74–032**

**Pesticide, Transport and Runoff Model for Agricultural Land – REF. NO. EPA-660/2–74–013**

**Pollution Aspects of Catfish Production—Review and Projections – REF. NO. EPA-660/2–74–064**

**Pollution Problems and Research Needs for an Oil Shale Industry – REF. NO. EPA-660/2–74–067**

**Prediction of Sub-soil Erodibility Using Chemical, Mineralogical and Physical Parameters – REF. NO. EPA-660/2–74–043**

**Preliminary Design of a Comprehensive Waste Oil Processing Facility – REF. NO. EPA-670/2–75–056**

**Programmed Demonstration for Erosion and Sediment Control Specialist – REF. NO. EPA-660/2–74–071**

**Quantification of Pollution in Agricultural Runoff – REF. NO. EPA-660/2–74–005**

**Removal of Heavy Metals from Mine Drainage by Precipitation – REF. NO. EPA-670/2–73–080**

**Removal of Manganese From Mine Drainage by Ozone and Chlorine – REF. NO. EPA-670/2–75–006**

**Research Status of Effects of Land Application of Animal Wastes – REF. NO. EPA-660/2–75–010**

**Selected Irrigation Return Flow Quality Abstracts: 1972–1973 – REF. NO. EPA-660/2–74–049**

**Soil Modification for Denitrification and Phosphate Reduction of Feed Lot Wastes – REF. NO. EPA-660/2–74–057**

**Sources of Oil and Water in Bilges of Great Lakes Ships – REF. NO. EPA-670/2–74–054**

**State of Maryland Waste Oil Recovery and Reuse Program – REF. NO. EPA-670/2–74–013**

**State-of-the-Art: Sand and Gravel Industry – REF. NO. EPA-660/2–74–066**

**State-of-the-Art: Uranium Mining, Milling, and Refining Industry – REF. NO. EPA-660/2–74–038**

**Storage and Disposal of Iron Ore Processing Wastewater – REF. NO. EPA-660/2–74–018**

**Survival of Pathogens in Animal Manure Disposal – REF. NO. EPA-660/2–75–012**

**Treatment and Ultimate Disposal of Cattle Feedlot Wastes – REF. NO. EPA-660/2–75–013**

**Treatment of Hazardous Material Spills With Floating Mass Transfer Media – REF. NO. EPA-670/2–73–078**

**Up-Dip Versus Down-Dip Mining: An Evaluation – REF. NO. EPA-670/2–75–047**

**Use of Soil Parameters for Describing Pesticide Movement Through Soils – REF. NO. EPA-660/2–75–009**

**Volatization of Losses of Pesticides from Soil – REF. NO. EPA-660/2–74–054**

# CURRENT PROGRAM AREA INDEX

## NON-POINT POLLUTION CONTROL

Waste Oil Recycling and Disposal – REF. NO. EPA-670/2-74-052
Waste Treatment System for Confined Hog Raising Operations – REF. NO. EPA-660/2-74-047
Water Quality Control in Mine Spoils — Upper Colorado River Basin – REF. NO. EPA-670/2-75-048

## AIR POLLUTION CONTROL

Absorption of SO2 into Lime Slurries: Absorption Rates and Kinetics – REF. NO. EPA-650/2-73-047
Adsorption of Odorous Pollutants by Active Manganese Dioxide – REF. NO. EPA-650/2-74-063
Aerodynamic Control of Nitrogen Oxides and Other Pollutants from Fossil Fuel Combustion Volume II – Raw Data and Experimental Equipment – REF. NO. EPA-650/2-73-033b
Aerodynamic Control of Nitrogen Oxides and Other Pollutants From Fossil Fuel Combustion Volume I – Data Analysis and Summary of Conclusions – REF. NO. EPA-650/2-73-033a
Analysis of Test Data for NOX Control in Gas and Oil-Fired Utility Boilers – REF. NO. EPA-650/2-75-012
Andersen Filter Substrate Weight Loss – REF. NO. EPA-650/2-75-022
Applicability of the Meyers Process of Chemical Desulfurization of Coal: Initial Survey of Fifteen Coals – REF. NO. EPA-650/2-74-025
Application of Automatic Data Processing Technology to Laboratory Problems – REF. NO. EPA-650/2-75-035
Application of Holographic Methods to the Measurement of Flames and Particulate – Volume II – REF. NO. EPA-650/2-74-031b
Application of Holographic Methods to the Measurement of Flames and Particulate – Volume 1 – REF. NO. EPA-650/2-74-031a
Applying Fabric Filtration to Coal Fired Industrial BoilersA Preliminary Pilot Scale Investigation – REF. NO. EPA-650/2-74-058
Assessment of the Applicability of Automotive Emission Control Technology to Stationary Engines – REF. NO. EPA-650/2-74-051
Assessment of the Federal Noise Research, Development, and Demonstration Activities: FY 73 – FY 75 – REF. NO. EPA-600/2-75-010
Assessment of the Potential of Clean Fuels and Energy Technology – REF. NO. EPA-600/2-74-001
Assessment of Catalysts for Control of NOX from Stationary Power Plants, Phase I, Volume I – Final Report – REF.NO. EPA -650/2-75-001a
Assessment of Catalysts for Control of NOX from Stationary Power Plants, Phase I, Volume II – Data Bank Citation Indices – REF.NO. EPA -650/2-75-001b
Assessment of Particle Control Technology for Enclosed Asbestos Sources – REF. NO. EPA-650/2-74-088
Atmospheric Emissions from the Asphalt Industry – REF. NO. EPA-650/2-73-046
Atmospheric Emissions from Asphalt Roofing Processes – REF. NO. EPA-650/2-74-101
Atmospheric Emissions From the Petroleum Refining Industry – REF. NO. EPA-650/2-73-017
Boiler Modification Cost Survey for Sulfur Oxides Control by Fuel Substitution – REF. NO. EPA-650/2-74-123
Braxton Sonic Agglomerator Evaluation – REF. NO. EPA-650/2-74-036
Catalytic Combustion, a Pollution-Free Means of Energy Conversion – REF. NO. EPA-650/2-73-018
Catalytic Oxidation of Sulfur Dioxide Using Isotopic Tracers – REF. NO. EPA-650/2-73-020
Changes in the Global Energy Balance – REF. NO. EPA-650/2-74-116
Characterization and Control of Asbestos Emissions from Open Sources – REF. NO. EPA-650/2-74-090
Characterization of Atmospheric Emissions from Polyurethane Resin Manufacture – REF. NO. EPA-650/2-74-107
Charged Droplet Scrubbing of Submicron Particulate – REF. NO. EPA-650/2-74-075
Chemically Active Fluid-Bed Process for Sulphur Removal During Gasification of Heavy Fuel Oil—Second Phase – REF.NO. EPA -650/2-73-039
Chemically Active Fluid-Bed Process for Sulphur Removal During Gasification of Heavy Fuel Oil – Second Phase – REF.NO. EPA -650/2-74-109
Coke Charging Pollution Control Demonstration – REF. NO. EPA-650/2-74-022
Coke Oven Charging Emission Control Test Program – Supplemental Observations – REF. NO. EPA-650/2-74-062a
Coke Oven Charging Emission Control Test Program—Volume I – REF. NO. EPA-650/2-74-062
Coke Oven Smokeless Pushing System Design Manual – REF. NO. EPA-650/2-74-076
Combustion Control of Pollutants from Multiburner Coal-fired System – REF. NO. EPA-650/2-74-038
Conditioning of Fly Ash with Sulfamic Acid, Ammonium Sulfate, and Ammonium Bisulfact – REF. NO. EPA-650/2-74-114
Continuous Measurement of Total Gas Flowrate from Stationary Sources – REF. NO. EPA-650/2-75-020
Control of Environmental Impacts From Advanced Energy Sources – REF. NO. EPA-600/2-74-002
Control of Sulfur Dioxide Emissions from Copper Smelters: Volume I – Steam Oxidation of Pyritic Copper Concentrates – REF.NO. EPA -650/2-74-085a
Control of Sulfur Dioxide Emissions from Copper Smelters: Volume II – Hydrogen Sulfide Production from Copper Concentrates – REF. NO. EPA-650/2-74-085b
Control Technology for Fine Particulate Emissions – REF. NO. EPA-650/2-74-027
Demetallization of Heavy Residual Oils – REF. NO. EPA-650/2-73-041
Demetallization of Heavy Residual Oils – Phase II – REF. NO. EPA-650/2-73-041a
Demonstration of Reduced Hydrocarbon Emissions from Gasoline Loading Terminals – REF. NO. EPA-650/2-75-042
Design of an Optimum Distillate Oil Burner for Control of Pollutant Emissions – REF. NO. EPA-650/2-74-047
Design Development and Fabrication of a Prototype High-Vol. Particulate Mass Sampling Train – REF. NO. EPA-650/2-74-067
Design Trends and Operating Problems in Combustion Modification of Industrial Boilers – REF. NO. EPA-650/2-74-032

# CURRENT PROGRAM AREA INDEX

## AIR POLLUTION CONTROL

Design, Development, and Field Test of a Droplet Measuring Device – REF. NO. EPA-650/2-75-018
Design, Fabrication, and Installation of a Particulate Aerodynamic Test Facility – REF. NO. EPA-650/2-74-103
Detailed Cost Estimates For Advanced Effluent Desulfurization Processes – REF. NO. EPA-600/2-75-006
Determination of Hazardous Elements in Smelter-Produced Sulfuric Acid – REF. NO. EPA-650/2-74-131
Development of an Approach to Identification of Emerging Technology and Demonstration Opportunities – REF. NO. EPA-650/2-74-048
Development of Sampling and Analytical Methods of Lime/Limestone Wet Scrubbing Tests – REF. NO. EPA-650/2-74-024
Direct Use of Coal in a Fuel Cell: Feasibility Investigation – REF. NO. EPA-650/2-75-040
Disposal of By-products from Non-regenerable Flue Gas Desulfurization Systems: Initial Report – REF. NO. EPA-650/2-74-037a
Distributions of Industrial and Commercial-Institution External Combustion Boilers – REF. NO. EPA-650/2-75-021
Dynactor Scrubber Evaluation – REF. NO. EPA-650/2-74-082a
Effect of Gas Turbine Efficiency and Fuel Cost on Cost Producing Electric Power – REF. NO. EPA-650/2-74-041
Effectiveness of Selected Fuel Additives in Controlling Pollution Emissions From Residual Oil-Fired Boilers – REF. NO. EPA-650/2-73-031
Effects of Design and Operating Variables on $NO_x$ from Coal-Fired Furnaces— Phase I – REF. NO. EPA-650/2-74-002a
Effects of Design and Operating Variables on NOX from Coal-Fired Furnaces – Phase II – REF. NO. EPA-650/2-74-002b
Efficiencies in Power Generation – REF. NO. EPA-650/2-74-021
Electrostatic Precipitator Performance Model – REF. NO. EPA-650/2-74-132
Enclosed Coke Pushing and Quenching System Design Manual – REF. NO. EPA-650/2-73-028
Energy Consumption: Paper, Stone/Clay/Glass/Concrete, and Food Industries – REF. NO. EPA-650/2-75-032c
Energy Consumption: The Chemical Industry – REF. NO. EPA-650/2-75-032a
Energy Consumption: The Primary Metals and Petroleum Industries – REF. NO. EPA-650/2-75-032b
Entrainment Separators for Scrubbers – Initial Report – REF. NO. EPA-650/2-74-119a
Environmental Consideration in Future Energy Growth – REF. NO. EPA-600/5-73-004
Environmental Considerations for Oil Shale Development – REF. NO. EPA-650/2-74-099
Equimolar $NO_2$ Absorption into Magnesia Slurry – A Pilot Feasibility Study – REF. NO. EPA-650/2-73-015
Evaluation of the Fluidized-Bed Combustion Process Volume I – Pressurized Fluidized-Bed Combustion Process Development and Evaluation – REF. NO. EPA-650/2-73-048a
Evaluation of the Fluidized-Bed Combustion Process Volume II – Fluidized Bed Boiler Combined-Cycle Power Plant Development—Volume I Appendices – REF. NO. EPA-650/2-73-048b
Evaluation of the Fluidized-Bed Combustion Process Volume III – Pressurized Fluidized-Bed Boiler Development Plant Design – REF.NO. EPA -650/2-73-048c
Evaluation of the Fluidized-Bed Combustion Process Volume IV – Fluidized-Bed Gasification Desulfurization – REF.NO. EPA -650/2-73-048d
Evaluation of the Regenerative Pressurized Fluidized-Bed Combustion Process – REF. NO. EPA-650/2-74-012
Evaluation of Aeronetic Two-Phase Jet Scrubber – REF. NO. EPA-650/2-74-129
Evaluation of Centrifield Scrubber – REF. NO. EPA-650/2-74-129a
Evaluation of Equations for Designing Ammoniacal Scrubbers to Remove Sulfur Oxides from Waste Gas – REF. NO. EPA-650/2-74-035
Evaluation of Low-Sulfur Western Coal Characteristics, Utilization, and Combustion Experience – REF. NO. EPA-650/2-75-046
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification; Section I: Synthane Process – REF.NO. EPA -650/2-74-009b
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Liquefaction: Section 2. SRC Process – REF. NO. EPA-650/2-74-009f
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification: Section 5. BI-GAS Process – REF.NO. EPA -650/2-74-009g
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification Section I: Koppers-Totzek Process – REF.NO. EPA -650/2-74-009a
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Gasification; Section I: $CO_2$ Acceptor Process – REF.NO. EPA -650/2-74-009d
Evaluation of Pollution Control in Fossil Fuel Conversion Processes Liquefaction: Section I. COED Process – REF. NO. EPA-650/2-74-009e
Evaluation of Pollution Control in Fossil Fuel Conversion Processess Gasification; Section I; Lurgi Process – REF. NO. EPA-650/2-74-009c
Evaluation of Prechamber Spark Ignition Engine Concepts – REF. NO. EPA-650/2-75-023
Evaluation of R&D Investment Alternatives for $SO_x$ Air Pollution Control Processes – REF. NO. EPA-650/2-74-098
Evaluation of Sulfur Dioxide Emission Control Options for Iowa Power Boilers – REF. NO. EPA-650/2-74-127
EPA Alkali Scrubbing Test Facility: Limestone Wet Scrubbing Test Result – REF. NO. EPA-650/2-74-010
EPA Alkali Scrubbing Test Facility: Sodium Carbonate and Limestone Test Results – REF. NO. EPA-650/2-73-013
EPA Alkali Scrubbing Test Facility: Summary of Testing Through October 1974 – REF. NO. EPA-650/2-75-047
EPA Fine Particle Scrubber Symposium (San Diego, 5/28-30/74) – REF. NO. EPA-650/2-74-112
Fabric Filter Cleaning Studies – REF. NO. EPA-650/2-75-009
Fate of Trace Constituents of Coal During Gasification – REF. NO. EPA-650/2-73-004
Feasibility of Flux Force/Condensation Scrubbing for Fine Particulate Collection – REF. NO. EPA-650/2-73-036
Federal Aircraft Noise Research, Development, and Demonstration Programs: FY 73 – FY 75 – REF. NO. EPA-600/2-75-003
Federal Machinery Noise Research, Development and Demonstration: FY 73-75 – REF. NO. EPA-600/2-75-008

# CURRENT PROGRAM AREA INDEX

## AIR POLLUTION CONTROL

Federal Noise Effects Research: FY 73 – FY 75 — Abstracted 600/9–75–001a — REF. NO. EPA-600/1–75–001
Federal Surface Vehicle Noise Research, Development, and Demonstration Program: FY 73 – FY 75 — Abstracted 600/9–75–001a — REF. NO. EPA-600/2–75–002
Field Measurements of Particle Size Distribution Sizing Devices – REF. NO. EPA-650/2–73–035
Field Testing: Application of Combustion Modifications to Control NOx Emissions for Utility Boilers – REF. NO. EPA-650/2–74–066
Field Testing: Application of Combustion Modifications to Control Pollutant Emissions from Industrial Boilers – Phase I – REF.NO. EPA -650/2–74–078a
Fine Particle Scrubber Performance Tests – REF. NO. EPA-650/2–74–093
Flame Characterization Probes – REF. NO. EPA-650/2–74–023
Fluidized Bed Combustion Process Evaluation (Phase I – Residual Oil Gasification/Desulfurization Demonstration at Atmospheric Pressure) Volume I – Summary – REF. NO. EPA-650/2–75–027a
Fluidized Bed Combustion Process Evaluation (Phase I – Residual Oil Gasification/Desulfurization Demonstration at Atmospheric Pressure) Volume II – Appendices – REF. NO. EPA-650/2–75–027b
Fluoride Emissions from Phosphoric Acid Plant Gypsum Ponds – REF. NO. EPA-650/2–74–095
Fuels Technology: A State-of-the-Art Review – REF. NO. EPA-650/2–75–034
Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume 1 – REF. NO. EPA-650/2–73–019a
Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume II – Appendices A through H – REF. NO. EPA-650/2–73–019b
Full-Scale Desulfurization of Stack Gas by Dry Limestone Injection: Volume III – Appendices I through L – REF. NO. EPA-650/2–73–019c
Gasification of Fossil Fuels Under Oxidative, Reductive, and Pyrolytic Conditions – REF. NO. EPA-650/2–73–042
Identification and Assessment of Asbestos Emissions from Incidental Sources of Asbestos – REF. NO. EPA-650/2–74–087
Identification and Characterization of the Use of Mixed Conventional and Waste Fuels – REF. NO. EPA-650/2–75–017
Improved Air Pollution Control for a Kraft Recovery Boiler: Recovery Boiler No. 4 – REF. NO. EPA-650/2–74–071b
Improved Air Pollution Control for Kraft Recovery Boiler: Modified Recovery Boiler No. 3 – REF. NO. EPA-650/2–74–071a
Indigester Black Liquor Oxidation for Odor Control in Kraft Pulping – REF. NO. EPA-650/2–74–005
Influence of Fiber Characteristics on Particulate Filtration – REF. NO. EPA-650/2–75–002
Influence of Fly Ash Compositional Factors on Electrical Volume Resistivity – REF. NO. EPA-650/2–74–074
Instrumental Analyses for Wet Scrubbing Processes – REF. NO. EPA-650/2–74–064
Interactions of Stack Gas Sulfur and Nitrogen Oxides on Dry Berkau – REF. NO. EPA-650/2–73–029
Interpretative Compilation of EPA Studies Related to Coal Quality and Cleanability – REF. NO. EPA-650/2–74–030
Investigation of Particulate Emission from Oil-Fired Residential Heating Units – REF. NO. EPA-650/2–74–026
Investigation of Surface Combustion Concepts for NOx Control in Utility Boilers and Stationary Gas Turbines – REF.NO. EPA -650/2–73–014
Iron Foundry Cupola Recuperative Emission Control Demonstration — Design Manual – REF. NO. EPA-650/2–74–004
Kinetic Mechanisms of Methane/Air Combustion with Pollutant Formation – REF. NO. EPA-650/2–74–045
Kinetic Mechanisms Governing the Fate of Chemically Bound Sulfur and Nitrogen in Combustion – REF. NO. EPA-650/2–74–017
Lime/Limestone Scrubbing in a Pilot Dustraxtor – Key West – REF. NO. EPA-650/2–74–077
Lone Star Steel Steam-Hydro Air Cleaning System Evaluation – REF. NO. EPA-650/2–74–028
Marketing H2 SO4 from SO2 Abatement Sources— The TVA Hypothesis – REF. NO. EPA-650/2–73–051
Mathematical Model of Electrostatic Precipitation – REF. NO. EPA-650/2–75–037
Mathematical Simulation of an Adsorber for Pollutant Removal – REF. NO. EPA-650/2–74–110
Measurement and Characterization of Particles in Wet Scrubbing Process for SOx Control – REF. NO. EPA-650/2–73–024
Measurement of Entrained Liquid Levels in Effluent Gases from Scrubber Demisters – REF. NO. EPA-650/2–74–050
Measurement of Sulfur Dioxide, Particulate, and Trace Elements in Copper Smelter Converter and Roaster/Reverberatory Gas Streams – REF. NO. EPA-650/2–74–111
Occurrence and Distribution of Potentially Volatile Trace Elements in Coal – REF. NO. EPA-650/2–74–054
Odor Removal from Air by Adsorption on Charcoal – REF. NO. EPA-650/2–74–084
Oil Shale Air Pollution Control – REF. NO. EPA-600/2–75–009
Optical Measurements of Smoke Particle Size Generated by Electric Arcs – REF. NO. EPA-650/2–74–034
Particulate Collection Efficiency Measurements on a Wet Electrostatic Precipitator – REF. NO. EPA-650/2–75–033
Particulate Collection Study, EPA/TVA Full-Scale Dry Limestone Injection Tests – REF. NO. EPA-650/2–74–053
Particulate Emissions from Alfalfa Dehydrating Plants — Control Costs and Effectiveness – REF. NO. EPA-650/2–74–007
Particulate Sizing Techniques for Control Device Evaluation – REF. NO. EPA-650/2–74–102
Pentapure Impinger Evaluation – REF. NO. EPA-650/2–75–024a
Petrograhpic Characteristics and Physical Properties of Marls, Chalks, Shells and Their Calcines Related to Desulfurization of Flue Gases – REF. NO. EPA-650/2–73–044
Pilot-Plant Study of an Ammonia Absorption Ammonium Bisulfate Regeneration Process, Topical Report Phases I and II – REF.NO. EPA -650/2–74–049a
Pollutant Analysis Cost Survey – REF. NO. EPA-650/2–74–125
Potentially Hazardous Emissions From The Extraction and Processing of Coal and Oil – REF. NO. EPA-650/2–75–038
Procedures for Measurement in Stratified Gases – Volume I – REF. NO. EPA-650/2–74–086a
Procedures for Measurement in Stratified Gases – Volume II, Appendices – REF. NO. EPA-650/2–74–086b
Proceeding, Coal Combustion Seminar, June 19–20, 1973 – REF. NO. EPA-650/2–73–021

# CURRENT PROGRAM AREA INDEX

## AIR POLLUTION CONTROL

**Proceedings of Third International Conference on Fluidized-Bed Combustion – REF. NO. EPA-650/2-73-053**
**Proceedings, Symposium Control of Fine-Particulate Emissions from Industrial Sources, January 15–18, 1974 San Francisco, CA – REF. NO. EPA-600/2-74-008**
**Proceedings: Flue Gas Desulfurization Symposium 1973 – REF. NO. EPA-650/2-73-038**
**Proceedings: Symposium on the Use of Fabric Filters for the Control of Submicron Particulates (April 8–10, 1974, Boston, Ma.) – REF.NO. EPA -650/2-74-043**
**Proceedings: Symposium on Flue Gas Desulfurization – Atlanta, November 1974, Volume II – REF. NO. EPA-650/2-74-126b**
**Process Modifications for Control of Particulate Emissions from Stationary Combustion, Incineration, and Metals – REF.NO.** EPA -650/2-74-100
**Production of Clean Fuel Gas From Bituminous Coal – REF. NO. EPA-650/2-73-049**
**Production of Low-Sulfur Gasoline – REF. NO. EPA-650/2-74-130**
**Program for Reduction of NOx from Tangential Coal-Fired Boilers – Phase 1 – REF. NO. EPA-650/2-73-005**
**Properties of Ammonium Sulfate, Ammonium, and Sulfur Dioxide Solutions in Ammonia Scrubbing Processes – REF.NO.** EPA -650/2-73-012
**Reduction of Atmospheric Pollution by the Application of Fluidized-Bed Combustion – REF. NO. EPA-650/2-74-057**
**Reduction of Atmospheric Pollution by the Application of Fluidized-Bed Combustion and Regeneration of Sulfur-Containing Additives – REF. NO. EPA-650/2-74-104**
**Refinery Catalytic Cracker Reginerator SOx Control Process Survey – REF. NO. EPA-650/2-74-082**
**Regenerative Limestone Process for Fluidized – Bed Coal Combustion and Desulfurization – REF. NO. EPA-650/2-74-001**
**Sasol Type Process for Gasoline, Methanol, SNG, and Low-BTU Gas from Coal – REF. NO. EPA-650/2-74-072**
**Scale Control in Limestone Wet Scrubbing Systems – REF. NO. EPA-650/2-75-031**
**Selected Characteristics of Hazardous Pollutant Emissions – REF. NO. EPA-600/2-74-004**
**Seminar on Electrostatics and Fine Particles — September 1973 – REF. NO. EPA-650/2-74-081**
**Sodium Conditioning to Reduce Fly Ash Resistivity – REF. NO. EPA-650/2-74-092**
**Solid Waste Disposal Final Report – REF. NO. EPA-650/2-74-033**
**Source Assessment Prioritization of Air Pollution from Industrial Surface Coating Operations – REF. NO. EPA-650/2-75-019a**
**Sources and Characterization of Fine Particulate Test Dusts – REF. NO. EPA-650/2-74-117**
**St. Louis Refuse Processing Plant Equipment, Facility, and Environmental Evaluations – REF. NO. EPA-650/2-75-044**
**St. Louis/Union Electric Refuse Firing Demonstration Air Pollution Test Support – REF. NO. EPA-650/2-74-073**
**State-of-the-Art Report on Sampling of Particulates in Combustion Gases from Fossil Fuels – REF. NO. EPA-650/2-74-018**
**Statistical Concepts for Design Engineers – REF. NO. EPA-650/2-74-080**
**Stone & Webster/Ionics SO$B2$A Removal and Recovery Process: Phase I, Final Report – REF. NO. EPA-650/2-75-045**
**Study of Air Pollutant Emissions from Residential Heating Systems – REF. NO. EPA-650/2-74-003**
**Study of Combustor Flow Computations and Comparison with Experiment – REF. NO. EPA-650/2-73-045**
**Study of Potential Problems and Optimum Opportunities in Retrofitting Industrial Processes to Low and Intermediate Energy Gas from Coal – REF. NO. EPA-650/2-74-052**
**Study of SOx Control For Selected Industrial Boilers – REF. NO. EPA-600/2-75-011**
**Sulfur and Nitrogen Balances in the Solvent Refined Coal Process – REF. NO. EPA-650/2-75-011**
**Sulfur Compound Emissions of the Petroleum Production Industry – REF. NO. EPA-650/2-75-030**
**Sulfur Oxide Throwaway Sludge Evaluation Panel (SOTSEP), Volume I: Final Report – Executive Summary – REF.NO.** EPA -650/2-75-010a
**Sulfur Oxide Throwaway Sludge Evaluation Panel (SOTSEP), Volume II: Final Report – Technical Discussion – REF.NO.** EPA -650/2-75-010b
**Symposium on Electrostatic Precipitators for the Control of Fine Particles – REF. NO. EPA-650/2-75-016**
**Symposium on Flue Gas Desulfurization – Atlanta, November 1974 Volume I – REF. NO. EPA-650/2-74-126a**
**Symposium Proceedings: Environmental Aspects of Fuel Conversion Technology (May 1974, St. Louis, Missouri) – REF.NO.** EPA -650/2-74-118
**System Analysis of Air Pollutant Emissions from the Chemical/ Plastics Industry – REF. NO. EPA-650/2-74-106**
**Systems Analysis Requirements for Nitrogen Oxide Control of Stationary Sources – REF. NO. EPA-650/2-74-091**
**Techniques for Measuring Fly Ash Resistivity – REF. NO. EPA-650/2-74-079**
**Testing of a Molecular Sieve Used to Control Mercury Emission From A Chlor-Alkali Plant, Volume I – REF. NO. EPA-650/2-75-026a**
**Testing of a Molecular Sieve Used to Control Mercury Emission From A Chlor-Alkali Plant, Volume II – Appendices – REF.NO.** EPA -650/2-75-026b
**Theoretical and Experimental Study of the Lime/Limestone Wet Scrubbing Process – REF. NO. EPA-650/2-75-006**
**Thermal Radiation Modeling for Pollution Predictions – REF. NO. EPA-650/2-74-011**
**Trace Pollutant Emissions from the Processing of Metallic Ores – REF. NO. EPA-650/2-74-115**
**Trace Pollutant Emissions from the Processing of Non-Metallic Ores – REF. NO. EPA-650/2-74-122**
**Vinyl Chloride – An Assessment of Emissions Control Techniques and Costs – REF. NO. EPA-650/2-74-097**
**Wet Scrubber Liquid Utilization – REF. NO. EPA-650/2-74-108**

## DATA AND INFORMATION RESEARCH

# CURRENT PROGRAM AREA INDEX

## DATA AND INFORMATION RESEARCH

Accumulation of Tritium in Various Species of Fish Reared in Tritiated Water – REF. NO. EPA-680/4-74-001
Development of a Biological Monitoring Network-A Test Case: Suitability of Livestock and Wildlife as Biological Monitors for Organophosphorus Contaminants – REF. NO. EPA-680/4-75-003
Directory of EPA, State and Local Environmental Quality Monitoring and Assessment Activities – REF. NO. EPA-600/4-75-001
Ground Water Pollution Features of Federal and State Laws and Regulations – REF. NO. EPA-600/4-73-001a
Handbook of Radiochemical Analytical Methods — Abstracted 600/9-75-001a — REF. NO. EPA-680/4-75-001
Polluted Groundwater: A Review of the Significant Literature – REF. NO. EPA-600/4-74-001
Polluted Groundwater: Estimating the Effects of Man's Activities (Formerly 600/4-74-002) – REF. NO. EPA-680/4-74-002
Polluted Groundwater: Some Causes, Effects, Controls and Monitoring – REF. NO. EPA-600/4-73-001b
Rationale and Methodology for Monitoring Groundwater Polluted by Mining Activities (Formerly 600/4-74-003) – REF.NO. EPA -680/4-74-003
Summary Report, Trail-Marking and Alarm Pheromones of Some Ants of the Genus Atta – REF. NO. EPA-660/2-74-081

## EQUIPMENT AND TECHNIQUES

Absorption of SO2 by Alkaline Solutions in Venturi Scrubber Systems – REF. NO. EPA-650/2-73-003
Advanced Prototype Direct Reading Instrument for Particulate Mass Measurement – REF. NO. EPA-650/2-74-065
Analysis of Coprostanol, An Indicator of Fecal Contamination – REF. NO. EPA-660/2-74-021
Analytical Methodology Information Center: Activities for 1973 – 1974 – REF. NO. EPA-670/4-74-003a
Application of Odor Technology to Mobil Sources Emission Instrumentation – REF. NO. EPA-650/2-73-025
Aqueous Odor Thresholds of Organic Pollutants in Industrial Effluents — Abstracted 600/9-75-001a — REF. NO. EPA-660/4-75-002
Asbestos Fiber Atlas – REF. NO. EPA-650/2-75-036
Atomic Absorption Analysis of Phosphates in Water – REF. NO. EPA-670/2-73-079
Automated Analysis of Individual Refractory Organics in Polluted Water – REF. NO. EPA-660/2-74-076
Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents – REF. NO. EPA-670/4-73-001
Chemical and Physical Characterization of Automotive Exhaust Particulate Matter in the Atmosphere (Year Ending June 30, 1972) – REF. NO. EPA-650/2-73-001
Chemical and Physical Characterization of Automotive Exhaust Particulate Matter in the Atmosphere (Year Ending June 30, 1973) – REF. NO. EPA-650/2-73-002
Compact Sampling System for Collection of Particulates from Stationary Sources – REF. NO. EPA-650/2-74-029
Comparison of Germanium Detectors for Neutron Activation Analysis for Mercury – REF. NO. EPA-660/2-74-045
Design, Construction, and Testing of a Commercial Prototype Disc Diluter – REF. NO. EPA-650/2-74-055
Design, Fabricate, and Demonstrate an Instrument for Assaying Benzo (a) Pryrene – REF. NO. EPA-650/2-74-068
Determination of Coronal Ozone Production by High Voltage Power Transmission Lines – REF. NO. EPA-650/4-73-003
Determination of Molecular Hydrogen Sulfide — Abstracted 600/9-75-001a — REF. NO. EPA-660/4-75-001
Determination of Volatile Organic Compounds at the UG/1 Level in Water by Gas Chromatography – REF. NO. EPA-670/4-74-009
Development and Fabrication of Mass Emission Data and Control System for the Stationary Source Simulator – REF.NO. EPA -650/2-73-009
Development of a High-Purity for High Temperature Particulate Sampling and Analysis – REF. NO. EPA-650/2-73-032
Development of a Prototype Nitrate Detector – REF. NO. EPA-650/2-74-133
Development of a Prototype Sulfuric Acid Monitor – REF. NO. EPA-650/2-75-013a
Development of a Supplementary Emission Measurements Monitoring System – REF. NO. EPA-650/2-73-008
Development of an Instrumental Monitoring Method for Measurement of Asbestos Concentrations in or Near Sources – REF.NO. EPA -650/2-73-016
Development of A Gas Laser System to Measure Trace Gases by Long Path Absorption Techniques: Volume II – Field Evaluation of Gas Laser System for Ozone Monitoring Final Report – REF. NO. EPA-650/2-74-046b
Development of Gas Laser System to Measure Trace Gases by Longpath Absorption Techniques:Volume I – Gas Laser System Modification for Ozone Monitoring Final Report – REF. NO. EPA-650/2-74-046a
Development of Instrumentation for Measurement of Stationary Source Aldehyde Organic Acid and Amine Emissions – REF.NO. EPA -650/2-73-010
Development of Instrumentation for Quantitative Collection of Total Atmospheric Mercury From Ambient Air-Final Report – REF.NO. EPA -650/2-73-052
Development of Low Pressure Impactor – REF. NO. EPA-650/2-74-014
Development of Method for Carcinogenic Vapor Analysis in Ambient Atmospheres – REF. NO. EPA-650/2-74-121
Development of Range Squared and Off-Gating Modifications for a Lidar System – REF. NO. EPA-650/2-73-040
Development of Sampling Method for Total Atmospheric Selenium – REF. NO. EPA-650/2-74-124
Development of Sampling Procedures for Polycyclic Organic Matter and Polychlorinated Biphenyls – REF. NO. EPA-650/2-75-007
Development of Scanning Electron Microscopy for Measurement of Airborne Asbestos Concentrations – REF. NO. EPA-650/2-75-029
Development of Selective Hydrocarbon Sampling System and Field Evaluation with Conventional System – REF. NO. EPA-650/2-75-050
Development of X-Ray Fluorescence Spectroscopy in Element Analysis of Particulate Matter Phase II: Evaluation of Commerical Multiple Crystal Spectrometer Instruments – REF. NO. EPA-650/2-73-006

# CURRENT PROGRAM AREA INDEX

## EQUIPMENT AND TECHNIQUES

Device Collection and Assay of Ambient Gases – REF. NO. EPA-650/2–74–006
Direct Determination of Metals in Air – REF. NO. EPA-650/2–73–011
Effects of Nozzle Design and Sampling Techniques on Aerosol Measurements – REF. NO. EPA-650/2–74–070
Environmental Applications of Advanced Instrumental Analyses: Assistance Projects, FY '73 – REF. NO. EPA-660/2–74–078
Environmental Applications of Advanced Instrumental Analysis: Assistance Projects, FY 72 – REF. NO. EPA-660/2–73–013
Environmental Exposure System for Studying Air Pollution Damage to Materials – REF. NO. EPA-650/3–75–001
Environmental Requirements and Pollution Tolerance of Freshwater Diatoms – REF. NO. EPA-670/4–74–005
Estimation of Polychlorinated Biphenyls in the Presence of Dot-Type Compounds – REF. NO. EPA-670/4–74–004
Evaluation and Modification of Fluoride Sampling and Analytical Methods – REF. NO. EPA-650/2–73–007
Evaluation of a Computer Program for GC-MS Specific Ion Monitoring – REF. NO. EPA-660/2–74–002
Evaluation of a Microwave-Induced Plasma Spectrometer for Trace Analysis – REF. NO. EPA-660/2–73–009
Evaluation of Flame Emission Determination of Phosphorus in Water – REF. NO. EPA-660/2–73–007
Evaluation of Instrumentation for Monitoring Total Mercury Emissions from Stationary Sources – REF. NO. EPA-650/2–74–039
Evaluation of Odor Measurement Techniques Volume I – Animal Rendering Industry – REF. NO. EPA-650/2–74–008a
Fabrication and Installation of the Stationary Source Simulator – REF. NO. EPA-650/2–75–015
Feasibility of a CW Lidar Technique for Measurement of Plume Opacity – REF. NO. EPA-650/2–73–037
Feasibility Study of the Use of Resonance Scattering for the Remote Detection of SO2 – REF. NO. EPA-650/2–74–020
Field Testing and Evaluation of Methods for Measuring Visibility – REF. NO. EPA-650/2–75–039
Implementation of a Computer Based Information System for Mass Spectral Identification – REF. NO. EPA-660/2–74–048
Improvement of Instrumentation and Methodology for Collection and Analysis of Mercury – REF. NO. EPA-650/2–75–028
In-Stack Transmissometer Evaluation and Application to Particulate Opacity Measurement – REF. NO. EPA-650/2–75–008
In-Stack Transmissometer Measurement of Particulate Opacity and Mass Concentration – REF. NO. EPA-650/2–74–120
Infrared Fourier Transform Spectrometry of Gas Chromatography Effluents – REF. NO. EPA-660/2–73–034
Infrared Gas Filter Correlation Instrument for In-Situ Measurement of Gaseous Pollutants – REF. NO. EPA-650/2–74–094
Infrared Sensor for the Remote Monitoring of SO$B2$A – REF. NO. EPA-650/2–75–041
Instrument for Simultaneous Monitoring NOx and SO2 in Stationary Sources – REF. NO. EPA-650/2–73–027
Instrument to Monitor CH4, CO and CO2 in Auto Exhaust – REF. NO. EPA-650/2–73–030
Instrumentation and Methodology for the Assay of Polynuclear Aromatic Hydrocarbons – REF. NO. EPA-650/2–74–069
Interferometric Instrumentation For Particle Size Analysis – REF. NO. EPA-650/2–73–034
Investigation of Extractive Sampling Interface Parameters – REF. NO. EPA-650/2–74–089
Investigation of Particulate Matter Monitoring Using Contact Electrification – REF. NO. EPA-650/2–75–043
Investigation of Remote Sensing Techniques for Agricultural Feedlot Pollution Detection – REF. NO. EPA-670/4–73–002
Ion-Selective Membranes Electrodes for Water Pollution Water Monitoring – REF. NO. EPA-660/2–74–079
Isolation of Hayfever Antigens from Short Ragweed Pollen – REF. NO. EPA-650/2–74–044
Manual Methods for Sampling and Analysis of Particulate Emissions From Municipal Incinerators – REF. NO. EPA-650/2–73–023
Measurement of the Opacity and Mass Concentration of Particulate Emissions by Transmissometry – REF. NO. EPA-650/2–74–128
Mercury in the Environment – REF. NO. EPA-660/2–73–008
Methodology for Assignment of a Hydrocarbon Photochemical Reactivity Index for Emissions From Mobile Sources – REF.NO. EPA -650/2–75–025
Methods for Rapid and Accurate Measurement of Nitrate and Sulfate in Atmospheric Particulates – REF. NO. EPA-650/2–73–050
Multielement Analyses of Environmental Samples by Spark Source Mass Spectrometry – REF. NO. EPA-660/2–74–001
NO2 Measuring System – REF. NO. EPA-650/2–74–059
Occurrence of Organohalides in Chlorinated Drinking Waters – REF. NO. EPA-670/4–74–008
Performance Specifications for Stationary-Source Monitoring Systems for Gases and Visible Emissions – REF. NO. EPA-650/2–74–013
Proceedings of Seminar on Methodology for Monitoring the Marine Environment – REF. NO. EPA-600/4–74–004
Progress in Instrumentation and Techniques for Measurement of Air Pollutants – REF. NO. EPA-650/2–74–015
Quantitative Analysis of Airborne Asbestos by X-Ray Diffraction: Final Report on Feasibility Study – REF. NO. EPA-650/2–75–004
Remote Sensing of Air Pollution in Urban Areas – REF. NO. EPA-650/2–73–026
Remote Sensing of Pollutants – Computerized Reduction of Long-Path Absorption Data – REF. NO. EPA-650/2–74–113
Reviews of Current Literature on Analytical Methodology and Quality Control – Activities for 1973 through 1974 – REF.NO. EPA -670/4–74–003b
Sampling Interface for Quantitative Transport of Aerosols – REF. NO. EPA-650/2–74–016
Seminar Summary: Sampling and Analysis of the Various Forms of Atmospheric Lead – REF. NO. EPA-650/2–75–003
Simplified Atomic Absorption Determination of Stable Strontium in Milk and Hay – REF. NO. EPA-680/4–73–002
Simultaneous and Automated Determination of Total Phosphorous and Total Kjeldahl – REF. NO. EPA-670/4–74–002
Specific Ion Mass Spectrometric Detection for Gas Chromatographic Pesticide Analysis – REF. NO. EPA-660/2–74–004
State-of-the-Art: 1971 Instrumentation for Measurement of Particulate Emissions from Combustion Sources – REF.NO. EPA -650/2–73–022
Study of Indoor Air Quality – REF. NO. EPA-650/4–74–042
Synthesis and Purification of Carcinogenic Polynuclear Aromatic Hydrocarbon Standards – REF. NO. EPA-650/2–74–040

# CURRENT PROGRAM AREA INDEX

## EQUIPMENT AND TECHNIQUES

Synthesis of Trifluoromethylsulfur Pentafluoride (CF3SF5) – REF. NO. EPA-650/4-74-010
Taxonomy and Ecology of Stenonema Mayflies (Heptageniidae: Ephemeroptera) — Abstracted 600/9-75-001a — REF.NO. EPA -670/4-74-006
Tissue Enzyme Assay for Chlorinated Hydrocarbon Insecticides – REF. NO. EPA-660/2-73-027
Virus in Waste, Renovated, and Other Waters - 1973 Literature Abstracts – REF. NO. EPA-670/9-74-005
Viruses in Waste Renovated and Other Viruses – 1972 Literature Abstracts – REF. NO. EPA-670/2-73-003

## QUALITY ASSURANCE

Activities and Needs Related to Radioactive Standards for Environmental Measurements: A Symposium held in Washington, DC, August 21, 1973 – REF. NO. EPA-670/4-75-006
Application and Procurement of Automatic Wastewater Samplers — Abstracted 600/9-75-001a — REF. NO. EPA-670/4-75-003
Collaborative Study of EPA Methods 5,6, and 7 in Fossil Fuel-Fired Steam Generators – REF. NO. EPA-650/4-74-013
Collaborative Study of Method for the Determination of Nitrogen Oxide Emissions from Stationary Sources (Fossil Fuel-Fired Steam Generators) – REF. NO. EPA-650/4-74-025
Collaborative Study of Method for the Determination of Nitrogen Oxide Emissions from Stationary Sources (Nitric Acid Plants) – REF. NO. EPA-650/4-74-028
Collaborative Study of Method for the Determination of Particulate Matter Emissions From Stationary Sources (Fossil Fuel-Fired Steam Generators) – REF. NO. EPA-650/4-74-021
Collaborative Study of Method for the Determination of Particulate Matter Emissions from Stationary Sources (Municipal Incinerators) – REF. NO. EPA-650/4-74-022
Collaborative Study of Method for the Determination of Particulate Emissions from Stationary Sources (Portland Cement Plants) – REF. NO. EPA-650/4-74-029
Collaborative Study of Method for the Determination of Sulfur Dioxide Emissions From Stationary Sources (Fossil Fuel-Fired Steam Generators) – REF. NO. EPA-650/4-74-024
Collaborative Study of Method for the Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources – REF. NO. EPA-650/4-75-003
Collaborative Study of Method for Determination of Stack Gas Velocity and Volumetric Flow Rate in Conjunction with EPA Method 5 – REF. NO. EPA-650/4-74-033
Collaborative Study of Method for Stack Gas Analysis and Determination of Moisture Fraction with Use of Method 5 – REF.NO. EPA -650/4-74-026
Collaborative Study of Method 10 – Reference Method for Determination of Carbon Monoxide Emissions from Stationary Sources – Report of Testing – REF. NO. EPA-650/4-75-001
Collaborative Study of Method 104 – Reference Method for Determination of Beryllium Emission from Stationary Sources – REF.NO. EPA -650/4-74-023
Collaborative Study of Reference Method for Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method) (24-hour Sampling) – REF. NO. EPA-650/4-74-027
Collaborative Test of the Continuous Colori-Metric Method for Measurement of Nitrogen Dioxide in Ambient Air – REF.NO. EPA -650/4-75-011
Collaborative Test of the TGS-ANSA Method for Measurement of Nitrogen Dioxide in Ambient Air – REF. NO. EPA-650/4-74-046
Collaborative Testing Methods for Measurements of NO2 in Ambient Air Volume I – Report of Testing – REF. NO. EPA-650/4-74-019a
Concepts for Development of Field Usable Test Atmosphere Generating Devices – REF. NO. EPA-650/4-74-016
Development of Technical Specifications for Standard Gas-Diluent Mixtures for Use in Measurement of Mobile Source Emissions – REF. NO. EPA-650/4-74-020
Environmental Radioactivity Laboratory Intercomparison Studies Program, 1973 – 1974 – REF. NO. EPA-680/4-73-001b
Environmental Radioactivity Laboratory Intercomparison Studies Program—1975 – REF. NO. EPA-680/4-75-002b
Evaluation and Collaborative Study of Method for Visual Determination of Opacity of Emissions from Stationary Sources – REF.NO. EPA -650/4-75-009
Evaluation of the Arsenite Procedure for the Determination of Nitrogen Dioxide in Ambient Air – REF. NO. EPA-650/4-74-048
Evaluation of the Ryan's Waterproof Thermograph (Model F-30) – REF. NO. EPA-670/4-74-007
Evaluation of the Triethanolamine Procedure for the Determination of Nitrogen Dioxide in Ambient Air – REF. NO. EPA-650/4-74-031
Evaluation of TGS-ANSA Procedure for Determination of Nitrogen Dioxide in Ambient Air – REF. NO. EPA-650/4-74-047
Fortran Programs for Analyzing Collaborative Test Data: Part I – General Statistics — Abstracted 600/9-75-001a — REF.NO. EPA -670/4-75-004a
Fortran Programs for Analyzing Collaborative Test Data: Part II – Scatter Plots — Abstracted 600/9-75-001a — REF.NO. EPA -670/4-75-004b
Guide for the Evaluation of Atmospheric Analyzers – REF. NO. EPA-650/4-74-014
Guidelines for Determining Performance Characteristics of Altimated Methods for Measuring Nitrogen Dioxide and Hydrocarbons, Corrected for Methane in Ambient Air – REF. NO. EPA-650/4-74-018
Guidelines for Development of a Quality Assurance Program: Volume XII – Determination of Phosphorus in Gasoline – REF.NO. EPA -650/4-74-005b

# CURRENT PROGRAM AREA INDEX

## QUALITY ASSURANCE

Guidelines for Development of a Quality Assurance Program: Volume XIII – Test for Lead in Gasoline by Atomic Absorption Spectrometry – REF. NO. EPA-650/4–74–005m
Guidelines for Development of a Quality Assurance Program: Volume I-Determination of Stack Gas Velocity and Volumetric FlowRate (Type-S Pitot Tube) – REF. NO. EPA-650/4–74–005a
Guidelines for Development of a Quality Assurance Program: Volume II – Gas Analysis for Carbon Dioxide, Excess Air, and Dry Molecular Weight – REF. NO. EPA-650/4–74–005b
Guidelines for Development of a Quality Assurance Program: Volume III – Determination of Moisture in Stack Gases – REF.NO. EPA -650/4–74–005c
Guidelines for Development of a Quality Assurance Program: Volume IV – Determination of Particulate Emissions from Stationary Sources – REF. NO. EPA-650/4–74–005d
Guidelines for Development of a Quality Assurance Program: Volume VIII – Determination of CO Emissions from Stationary Sources by NDIR Spectrometry – REF. NO. EPA-650/4–74–005h
Interfacing a 24-Point Analog Recorder to a Computer Controlled Telemetry Line — Abstracted 600/9–75–001a — REF.NO. EPA -670/4–75–002
Investigation of the Orion Research Cyanide Monitor – REF. NO. EPA-670/4–75–005
Laboratory and Field Evaluations of EPA Methods 2, 6 and 7 – REF. NO. EPA-650/4–74–039
Literature Survey of Instrumental Measurements of Biochemical Oxygen Demand for Control Application, 1960–1963 – REF.NO. EPA -670/4–74–001
Performance of the OSCO Model 1391 Water Wastewater Sampler — Abstracted 600/9–75–001a — REF. NO. EPA-670/4–75–001
Performance of the Union Carbide Dissolved Oxygen Sensor – REF. NO. EPA-670/4–73–018
Radioactivity Standards Distribution Program – 1975 – REF. NO. EPA-680/4–75–002a
Radioactivity Standards Distribution Program, 1973 – 1974 – REF. NO. EPA-680/4–73–001A
Summary Report: Workshop on Ozone Measurement by the Potassium Iodide Method – REF. NO. EPA-650/4–75–007
Survey of Manual Methods of Measurements of Asbestos, Beryllium, Lead, Cadmium, Selenium, and Mercury in Stationary Source Emissions – REF. NO. EPA-650/4–74–015
Survey of Users of the EPA – Reference Method for Measurement of Non-Methane Hydrocarbons in Ambient Air – REF.NO. EPA -650/4–75–008

## SOCIOECONOMIC RESEARCH

Aesthetics in Environmental Planning – REF. NO. EPA-600/5–73–009
Aluminum as a Component of Solid Waste and a Recoverable Resource – REF. NO. EPA-670/5–74–005
Analysis of Cost Sharing Programs for Pollution Abatement of Municipal Wastewater – REF. NO. EPA-600/5–74–031
Analysis of Nonpoint-Source Pollutants in the Missouri Basin Region — Abstracted 600/9–75–001a — REF. NO. EPA-600/5–75–004
Assessment of Economic Impact of Air Pollutants on Vegetation in the United States, 1969 and 1971 – REF. NO. EPA-650/5–73–002
Assessment Methodology for the Environmental Impact of Water Resource Projects – REF. NO. EPA-600/5–74–016
Benefit of Water Pollution Control on Property Values – REF. NO. EPA-600/5–73–005
Bibliography of the Cat – REF. NO. EPA-650/3–74–001
Bibliography of Water Pollution Control Benefits and Costs – REF. NO. EPA-600/5–74–028
California Environmental Quality Act: Innovation in State and Local Decision making – REF. NO. EPA-600/5–74–023
Can Federal Procurement Practices be Used to Reduce Solid Waste – REF. NO. EPA-670/5–74–003
Carrying Capacity in Regional Environmental Management – REF. NO. EPA-600/5–74–021
Case Study and Business Analysis of the Scrap Industry – REF. NO. EPA-670/5–74–002
Comprehensive Management of Phosphorus Water Pollution – REF. NO. EPA-600/5–74–010
Cost Evaluation of Alternative Air Quality Strategies – REF. NO. EPA-600/5–74–003
Cost-Effectiveness of a Uniform National Sulfur Emissions Tax – REF. NO. EPA-600/5–74–009
Criteria for Regional Solid Waste Management Planning — Abstracted 600/9–75–001a — REF. NO. EPA-670/5–74–006
Critique of Pollution Time Allocation in River Basin Model – REF. NO. EPA-600/5–73–007
Crop Insurance and Information Services to Control Use of Pesticides – REF. NO. EPA-600/5–74–018
Demonstration of a State Water Quality Management Information System – REF. NO. EPA-600/5–74–022
Design of Cost-Effective Water Quality Surveillance Systems – REF. NO. EPA-600/5–74–004
Development of a Decision Room For Environmental Studies – REF. NO. EPA-600/5–73–011
Development of Predictions of Future Pollution Problems – REF. NO. EPA-600/5–74–005
Economic and Environmental Benefits from Improving Electrical Rate Structures – REF. NO. EPA-600/5–74–033
Economic and Technological Impediments to Recycling Obsolete Ferrous Solid Waste – REF. NO. EPA-670/5–73–021
Economic Damages of Air Pollution – REF. NO. EPA-600/5–74–012
Economic Damages to Household Systems From Water Supply Use – REF. NO. EPA-600/5–73–001
Economic Disincentives for Pollution Control: Legal Political and Administrative Dimensions – REF. NO. EPA-600/5–74–026
Enforcement Economics in Air Pollution Control – REF. NO. EPA-600/5–73–014
Environment: A Bibliography of Social Science and Related Literature – REF. NO. EPA-600/5–74–011
Environmental Base and Management Study – Atchafalaya Basin, Louisiana – REF. NO. EPA-600/5–75–006

# CURRENT PROGRAM AREA INDEX

## SOCIOECONOMIC RESEARCH

Environmental Impact Requirements in the States: NEPA's Offspring – REF. NO. EPA-600/5–74–006
Environmental Management and Local Government – REF. NO. EPA-600/5–73–016
Estimating Water Quality Benefits – REF. NO. EPA-600/5–74–014
Evaluation of Adjustment Assistance Program with Application for Pollution Control – REF. NO. EPA-600/5–74–029
Evaluation of Alternative Methods For Financing Municipal Waste Treatment Works – REF. NO. EPA-600/5–75–001
Evaluation of Feasibility and Economic Implication of Pricing Mechanisms in Solid Waste Management — Abstracted 600/9–75–001a — – REF. NO. EPA-670/5–75–001
Evaluation of Marketable Effluent Permit Systems – REF. NO. EPA-600/5–74–030
Feasibility of Emission Standards Based on Particle Size – REF. NO. EPA-600/5–74–007
Financial Incentives and Pollution Control: A Case Study – REF. NO. EPA-600/5–75–007
Guide to Models in Governmental Planning and Operations – REF. NO. EPA-600/5–74–008
Hospital Solid Waste: An Annotated Bibliography – REF. NO. EPA-670/5–74–001
Influences of Wastewater Management on Land Use: Tahoe Basin 1950–1972 – REF. NO. EPA-600/5–74–019
Integrated Multi-media Pollution Model – REF. NO. EPA-600/5–74–020
Intermedia Aspects of Air and Water Pollution Control – REF. NO. EPA-600/5–73–003
Land Use and the Environment: An Anthology of Readings – REF. NO. EPA-600/5–75–009
Land Use Decision Methodology for Environmental Control – REF. NO. EPA-600/5–75–008
Land Use Forms and the Environment – An Executive Summary — Abstracted 600/9–75–001a — REF. NO. EPA-600/5–75–003
Managing the Environment – REF. NO. EPA-600/5–73–010
Minimum Standards For Quality of Life – REF. NO. EPA-600/5–75–012
Model Cities – REF. NO. EPA-600/5–74–027
Model for Optimal Design and Operation of Solid Waste Transfer Stations – REF. NO. EPA-670/5–74–009
Optimal Configuration of a Regional Solid Waste Management System – REF. NO. EPA-670/5–74–007
Optimization Models for Regional Public Systems – REF. NO. EPA-670/5–74–008
Outpatient Medical Costs Related to Air Pollution in the Portland, Oregon Area – REF. NO. EPA-600/5–74–017
Performance Controls for Sensitive Lands: A Practical Guide For Local Administrators – REF. NO. EPA-600/5–75–005
Promoting Environmental Quality Through Urban Planning and Control – REF. NO. EPA-600/5–73–015
Quality of Life Concept – A Potential New Tool For DecisionMakers – REF. NO. EPA-600/5–75–011
Regional Governmental Arrangements in Metropolitan Areas: Nine Case Studies – REF. NO. EPA-600/5–74–024
Research Needs and Priorities: Water Pollution Control Benefits and Cost – Volume II – REF. NO. EPA-600/5–73–008b
Review of Environmental Impact Assessment Methodologies – REF. NO. EPA-600/5–74–002
Secondary Fiber Recovery Incentive Analysis – REF. NO. EPA-670/5–74–004
Secondary Impact of Transportation and Wastewater Investments: Review and Bibliography — Abstracted 600/9–75–001a — REF. NO. EPA-600/5–75–002
Simulation City Approach for Preparation of Urban Area Data Bases – REF. NO. EPA-600/5–74–001
Socio-Economic Factors Affecting Demand for Municipal Collection of Household Refuse – REF. NO. EPA-670/9–73–035
State of the System (SOS) Model – REF. NO. EPA-600/5–73–013
State-of-the-Art Review: Water Pollution Control Benefits and Costs – Volume I – REF. NO. EPA-600/5–73–008a
Studies in Environment – Volume I – Summary Report – REF. NO. EPA-600/5–73–012a
Studies in Environment – Volume II – Quality of Life – REF. NO. EPA-600/5–73–012b
Studies in Environment – Volume III – Pollution and the Municipality – REF. NO. EPA-600/5–73–012c
Studies in Environment – Volume IV – Consumption Differentials and the Environment – REF. NO. EPA-600/5–73–012d
Studies in Environment – Volume V – Outdoor Recreation and the Environment – REF. NO. EPA-600/5–73–012e
Study of the Economics of Hospital Solid Waste Systems – REF. NO. EPA-670/5–73–020
Systems Simulation and Solid Waste Planning: A Case Study – REF. NO. EPA-670/5–73–012
Use of Environmental Analyses on Wastewater Facilities by Local Government – REF. NO. EPA-600/5–74–015
Used Oil Law in the U.S. and Europe – REF. NO. EPA-600/5–74–025
Waste Automotive Lubricating Oil Reuse as a Fuel – REF. NO. EPA-600/5–74–032
Water Quality Model for a Conjunctive Surface – Groundwater System – REF. NO. EPA-600/5–74–013

## SCIENCE ADVISORY BOARD

Nitrogenous Compounds in the Environment – REF. NO. EPA-SAB-73–001

## MISCELLANEOUS REPORTS

Active Research Tasks Report, Fiscal Year 1973 – REF. NO. EPA-670/9–73–056
Annual Report for Calendar Year 1972, Environmental Toxicology Research – REF. NO. EPA-670/1–73–036
Annual Report, 1972, NERC – Cincinnati – REF. NO. EPA-670/9–73–055
Bibliography of Publications and Reports of the Pacific Northwest Environmental Research Laboratory – REF. NO. EPA-660/9–74–001

# CURRENT PROGRAM AREA INDEX

## MISCELLANEOUS REPORTS

Bibliography of R&D Research Reports – July 1973 – REF. NO. EPA-600/5-73-002
Environmental Research in 1973, Annual Report – REF. NO. EPA-670/9-74-001
Environmental Research Publications – REF. NO. EPA-670/9-73-004
Environmental Research Publications 1971–1975 — Abstracted 600/9-75-001a — REF. NO. EPA-670/9-75-001
Excerpts from Control of Infiltration and Inflow into Sewer Systems and Prevention and Correction of Excessive Infiltration and Inflow into Sewer Systems – REF. NO. EPA-670/9-74-004
Indexed Bibliography of Office of Research and Development Reports – Updated to January 1975 — Abstracted 600/9-75-001a — REF. NO. EPA-600/9-74-002
Indexed Bibliography of Office of Research and Development Reports – REF. NO. EPA-600/9-74-001
News of Environmental Research in Cincinnati – May-December, 1973 – REF. NO. EPA-670/9-74-002
News of Environmental Research in Cincinnati, January – December 1974 — Abstracted 600/9-75-001a — REF. NO. EPA-670/9-75-003
NERC-Cincinnati Annual Report, 1974 – REF. NO. EPA-670/9-75-002
OR&D ADP Workshop Proceedings No. 1 – REF. NO. EPA-600/9-75-002
OR&D Publications Summary – March 1975 – REF. NO. EPA-600/9-75-001a
Pollution Control Technology Assessment – Proceedings of an Environmental Resources Conference, May 1–3, 1974 — Abstracted 600/9-75-001a — REF. NO. EPA-670/9-74-006
Scientific Seminar on Automotive Pollutants – REF. NO. EPA-600/9-75-003
Third U.S. — Japan Conference on Sewage Treatment Technology, Proceedings, February 12 – 16, 1974 – REF. NO. EPA-670/9-75-005

# PERFORMING ORGANIZATION INDEX

A.P.T., Inc. Riverside, CA – REF. NO. EPA-650/2-74-093
A.P.T., Inc. Riverside, CA – REF. NO. EPA-650/2-74-112
A.P.T., Inc. Riverside, CA – REF. NO. EPA-650/2-74-119a
A.P.T., Inc. Riverside, CA – REF. NO. EPA-650/2-73-036
Abcor, Incorporated, Walden Research Division Cambridge, MA – REF. NO. EPA-650/2-74-086a
Abcor, Incorporated, Walden Research Division Cambridge, MA – REF. NO. EPA-650/2-74-086b
Abcor, Incorporated, Walden Research Division Cambridge, MA – REF. NO. EPA-650/2-74-089
Abcor, Incorporated, Walden Research Division Cambridge, MA – REF. NO. EPA-650/2-74-105
Abcor, Incorporated, Walden Research Division Cambridge, MA – REF. NO. EPA-650/2-74-133
Academy of Natural Sciences of Philadelphia Philadelphia, PA – REF. NO. EPA-660/2-75-008
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-73-003
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-73-044
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-73-045
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-73-046
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-74-006
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-74-010
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-74-011
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-74-034
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-74-046
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-75-008
Advanced Waste Treatment Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-75-013
Aerospace Corporation El Segundo, CA – REF. NO. EPA-650/2-74-037a
Aerospace Corporation Los Angeles, CA – REF. NO. EPA-650/2-74-051
Aerospace Corporation Los Angeles, CA – REF. NO. EPA-650/2-74-059
Aerospace Corporation El Segundo, CA – REF. NO. EPA-650/3-74-007
Aerospace Corporation El Segundo, CA – REF. NO. EPA-650/2-75-012
Aerospace Corporation El Segundo, CA – REF. NO. EPA-650/2-75-023
Aerotherm Acurex Corporation Mountain View, CA – REF. NO. EPA-650/2-75-035
Aerotherm/Acurex Corporation Mountain View, CA – REF. NO. EPA-650/2-74-067
Aerotherm/Acurex Corporation Mountain View, CA – REF. NO. EPA-650/2-74-091
Aerotherm/Acurex Corporation Mountain View, CA – REF. NO. EPA-650/2-74-103
Aerotherm/Acurex Corporation Mountain View, CA – REF. NO. EPA-650/2-74-123
Aerotherm/Acurex Corporation Mountain View, CA – REF. NO. EPA-650/2-75-015
Air and Industrial Hygiene Laboratory, California State Department of Health Berkeley, CA – REF. NO. EPA-650/4-74-014
Air Pollution Control Division, ORD, EPA Washington, DC – REF. NO. EPA-600/2-74-008
Alabama A&M College Normal, AL – REF. NO. EPA-660/2-74-033
Alan M. Voorhees and Associates McLean, VA – REF. NO. EPA-600/5-74-001
Alaska, University of Fairbanks, AK – REF. NO. EPA-660/3-73-018
Alaska, University of Fairbanks, AK – REF. NO. EPA-650/4-75-012
Allied Chemical Corporation Morristown, NJ – REF. NO. EPA-650/2-74-040
American Crystal Sugar Company Denver, CO – REF. NO. EPA-660/2-74-093
American Dehydrators Association Mission, KS – REF. NO. EPA-650/2-74-007
American Distilling Company Pekin, IL – REF. NO. EPA-660/2-74-014
American Iron and Steel Institute New York, NY – REF. NO. EPA-650/2-74-022
American Public Works Association Chicago, IL – REF. NO. EPA-670/2-74-026
American Public Works Association Chicago, IL – REF. NO. EPA-670/2-74-039
American Public Works Association Chicago, IL – REF. NO. EPA-670/2-75-011
American Society of Planning Officials Chicago, IL – REF. NO. EPA-600/5-75-005
American Society of Planning Officials Chicago, IL – REF. NO. EPA-600/5-75-009
American Standards, Inc. New Brunswick, NJ – REF. NO. EPA-670/2-75-002
American Water Works Association Research Foundation New York, NY – REF. NO. EPA-660/2-73-020
Ames Laboratory, U.S. Atomic Energy Commission, Metallurgy Division, Iowa State University Ames, IA – REF. NO. EPA-670/2-73-091
Amoco Oil Company Naperville, IL – REF. NO. EPA-650/2-75-042
Anaconda American Brass Company Waterbury, CT – REF. NO. EPA-670/2-74-008
Anaconda Company Waterbury, CT – REF. NO. EPA-670/2-75-029
Analytical Research Laboratories, Inc. Monrovia, CA – REF. NO. EPA-650/4-74-050
Analytical Research Laboratories, Inc. Monrovia, CA – REF. NO. EPA-650/2-75-050
Andersen 2000, Inc. Atlanta, GA – REF. NO. EPA-650/2-74-014
Anheuser Busch St. Louis, MO – REF. NO. EPA-660/2-74-059
Applied Technology Corporation Pittsburgh, PA – REF. NO. EPA-670/2-74-001

Preceding page blank

# PERFORMING ORGANIZATION INDEX

Arctic Environmental Research Laboratory, EPA Fairbanks, AK – REF. NO. EPA-660/2-73-005
Arctic Environmental Research Laboratory, EPA College, AK – REF. NO. EPA-660/2-74-070
Arctic Environmental Research Laboratory, EPA College, AK – REF. NO. EPA-660/3-74-008
Arctic Environmental Research Laboratory, EPA College, AK – REF. NO. EPA-660/3-74-009
Arctic Environmental Research Laboratory, EPA College, AK – REF. NO. EPA-660/3-75-019
Arctic Environmental Research Laboratory, EPA College, AK – REF. NO. EPA-660/3-75-020
Argonne National Laboratory Argonne, IL – REF. NO. EPA-650/2-74-057
Argonne National Laboratory Argonne, IL – REF. NO. EPA-650/2-74-104
Arkansas, University of, College of Engineering Fayetteville, AR – REF. NO. EPA-660/2-74-044
Armageddon Chemical Company Durham, NC – REF. NO. EPA-650/4-74-010
Arnold Research Organization, Inc. Arnold Air Force Station, TN – REF. NO. EPA-650/2-73-034
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-650/2-73-023
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-650/2-73-025
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-650/2-73-032
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-670/2-74-033
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-670/2-74-045
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-670/2-74-086
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-670/5-74-003
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-650/2-75-031
Arthur D. Little, Inc. Cambridge, MA – REF. NO. EPA-670/2-75-024
Auburn University Auburn, AL – REF. NO. EPA-660/3-73-035
Autotrol Corporation Milwaukee, WI – REF. NO. EPA-670/2-74-050
ABT Associates, Inc. Cambridge, MA – REF. NO. EPA-600/5-74-018
ABT Associates, Inc. Cambridge, MA – REF. NO. EPA-670/5-75-001
ARO Inc. Arnold Air Force Station, TN – REF. NO. EPA-650/2-74-070
Babcock and Wilson Company Alliance, OH – REF. NO. EPA-650/2-73-015
Babcock and Wilson Company Alliance, OH – REF. NO. EPA-650/2-74-002a
Babcock and Wilson Company Alliance, OH – REF. NO. EPA-650/2-74-002b
Bacardi Company San Juan, PR – REF. NO. EPA-660/2-74-074
Baird-Atomic, Inc. Bedford, MA – REF. NO. EPA-670/4-74-004
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-73-001
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-73-002
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/2-73-032
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/9-73-035
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-600/2-74-001
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-600/5-74-002
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-600/5-74-005
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-600/5-74-016
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-74-018
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-74-026
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-74-032
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-74-048
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-74-052
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/3-74-087
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-74-099
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-74-100
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/3-74-002
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/4-74-009
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/2-74-014
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/2-74-083
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/2-74-084
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/4-74-003a
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/4-74-003b
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/9-74-006
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-75-034
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/2-75-038
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-650/3-75-002
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/2-75-018
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/2-75-055
Battelle Columbus Laboratories Columbus, OH – REF. NO. EPA-670/2-75-058
Battelle Memorial Institute Columbus, OH – REF. NO. EPA-600/5-73-004
Battelle Memorial Institute Richland, WA – REF. NO. EPA-670/2-73-078
Battelle Memorial Institute Columbus, OH – REF. NO. EPA-650/2-74-011
Battelle Memorial Institute Columbus, OH – REF. NO. EPA-650/3-74-011

# PERFORMING ORGANIZATION INDEX

Battelle Memorial Institute Columbus, OH – REF. NO. EPA-660/2-74-004
Battelle Memorial Institute Columbus, OH – REF. NO. EPA-660/2-74-048
Battelle Memorial Institute Richland, WA – REF. NO. EPA-670/2-75-012
Battelle Memorial Institute Columbus, OH – REF. NO. EPA-670/2-75-049
Battelle Pacific Northwest Laboratories Richland, WA – REF. NO. EPA-650/2-74-085a
Battelle Pacific Northwest Laboratories Richland, WA – REF. NO. EPA-650/2-74-085b
Battelle Pacific Northwest Laboratories Richland, WA – REF. NO. EPA-650/3-74-005
Battelle Pacific Northwest Laboratories Richland, WA – REF. NO. EPA-670/2-75-014
Bechtel Corporation San Francisco, CA – REF. NO. EPA-650/2-73-013
Bechtel Corporation San Francisco, CA – REF. NO. EPA-650/2-74-010
Bechtel Corporation San Francisco, CA – REF. NO. EPA-650/2-75-047
Beckman Instruments, Inc. Anaheim, CA – REF. NO. EPA-650/2-74-056
Beet Sugar Development Foundation Fort Collins, CO – REF. NO. EPA-660/2-74-028
Bendix Research Laboratories Southfield, MI – REF. NO. EPA-650/2-73-010
Bendix Research Laboratories Southfield, MI – REF. NO. EPA-650/2-74-006
Beychok, Milton R., Consulting Engineer Irvine, CA – REF. NO. EPA-660/2-75-011
Biospherics, Inc. Rockville, MD – REF. NO. EPA-600/2-75-004
Black & Veatch Consulting Engineers Kansas City, MO – REF. NO. EPA-670/2-75-050a
Black & Veatch Consulting Engineers Kansas City, MO – REF. NO. EPA-670/2-75-050b
Black & Veatch Consulting Engineers Kansas City, MO – REF. NO. EPA-670/2-75-050c
Black & Veatch Consulting Engineers Kansas City, MO – REF. NO. EPA-670/2-75-050d
Black & Veatch Consulting Engineers Kansas City, MO – REF. NO. EPA-670/2-75-050e
Black & Veatch Consulting Engineers Kansas City, MO – REF. NO. EPA-670/2-75-050f
Black & Veatch Consulting Engineers Kansas City, MO – REF. NO. EPA-670/2-75-050g
Black Hill Conservancy Sub-District Rapid City, SD – REF. NO. EPA-670/2-73-088
Black, Crow and Eidsness, Inc. Montgomery, AL – REF. NO. EPA-660/2-75-006
Boating Industry Association Chicago, IL – REF. NO. EPA-670/2-75-064
Boeing Commercial Airplane Company Seattle, WA – REF. NO. EPA-660/2-73-023
Booz-Allen Applied Research, Inc. Bethesda, MD – REF. NO. EPA-670/2-73-013
Booz-Allen Applied Research, Inc. Bethesda, MD – REF. NO. EPA-670/2-73-014
Booz-Allen Applied Research, Inc. Bethesda, MD – REF. NO. EPA-670/2-73-015
Booz-Allen Applied Research, Inc. Bethesda, MD – REF. NO. EPA-670/2-73-016
Booz-Allen Public Administration Services, Inc. Washington, DC – REF. NO. EPA-600/5-75-011
Bowdoin College Brunswick, ME – REF. NO. EPA-600/5-74-029
Bowling Green State University Bowling Green, OH – REF. NO. EPA-670/4-74-005
Brier, Glenn W., Consultant Fort Collins, CO – REF. NO. EPA-650/4-75-010
Brigham Young University Provo, UT – REF. NO. EPA-660/2-75-007
Byrne Engineering Corporation New Orleans, LA – REF. NO. EPA-670/2-73-067
C. F. and T. Steel Corporation Pueblo, CO – REF. NO. EPA-660/2-74-050
California Air Resources Board, State of El Monte, CA – REF. NO. EPA-650/4-74-052
California Department of Health Berkeley, CA – REF. NO. EPA-650/1-75-001
California Department of Health, State of Berkeley, CA – REF. NO. EPA-650/2-75-036
California Institute of Technology Pasadena, CA – REF. NO. EPA-660/3-73-010
California Public Affairs, Center for Claremont, CA – REF. NO. EPA-600/5-74-006
California Public Affairs, Center for Claremont, CA – REF. NO. EPA-600/5-74-023
California State College Turlock, CA – REF. NO. EPA-650/2-75-043
California, University of Irvaine, CA – REF. NO. EPA-660/3-73-015
California, University of Santa Cruz, CA – REF. NO. EPA-600/5-74-019
California, University of Berkeley, CA – REF. NO. EPA-650/4-74-004
California, University of Riverside, CA – REF. NO. EPA-660/2-74-054
California, University of Berkeley, CA – REF. NO. EPA-660/3-74-016
California, University of Davis, CA – REF. NO. EPA-660/3-74-034
California, University of Riverside, CA – REF. NO. EPA-670/2-74-005
California, University of Berkeley, CA – REF. NO. EPA-670/5-74-007
California, University of Berkeley, CA – REF. NO. EPA-670/5-74-008
California, University of Berkeley, CA – REF. NO. EPA-670/5-74-009
California, University of Davis, CA – REF. NO. EPA-660/2-75-002
California, University of Santa Barbara, CA – REF. NO. EPA-670/2-75-003
California, University of Santa Barbara, CA – REF. NO. EPA-670/2-75-044
California, University of Santa Barbara, CA – REF. NO. EPA-670/2-75-059
Calspan Corporation Buffalo, NY – REF. NO. EPA-650/3-73-002
Calspan Corporation Buffalo, NY – REF. NO. EPA-670/2-75-042
Center for the Environment and Man, Inc. Hartford, CT – REF. NO. EPA-650/4-73-001
Chase, Rosen and Wallace, Inc. Alexandria, VA – REF. NO. EPA-600/5-73-013

# PERFORMING ORGANIZATION INDEX

Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-74-015
Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-74-128
Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/3-74-008
Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/3-74-009
Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/3-74-010
Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-75-003
Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-75-025
Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/3-75-001
Chemistry and Physics Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/4-75-006
Chemistry and Physics Laboratory, EPA, Research Triangle Park, NC – REF. NO. EPA-650/2-74-046b
Chicago, University of Chicago, IL – REF. NO. EPA-600/5-75-003
Chino Basin Municipal Water District Cucamonga, CA – REF. NO. EPA-660/2-74-034
City of Chino Chino, CA – REF. NO. EPA-670/2-75-037
Clemson University, Environmental Systems Engineering Department Clemson, NC – REF. NO. EPA-670/2-73-061
Colorado State University Fort Collins, CO – REF. NO. EPA-660/2-73-017
Colorado State University Fort Collins, CO – REF. NO. EPA-650/2-74-034
Colorado State University Fort Collins, CO – REF. NO. EPA-650/3-74-003
Colorado State University Fort Collins, CO – REF. NO. EPA-660/2-74-049
Colorado State University Fort Collins, CO – REF. NO. EPA-660/2-74-052
Colorado State University Fort Collins, CO – REF. NO. EPA-660/2-74-084
Colorado State University Fort Collins, CO – REF. NO. EPA-670/2-75-048
Colorado State University, Department of Avian Science Fort Collins, CO – REF. NO. EPA-670/2-73-009
Columbia University, Division of Environmental Health Sciences New York City, NY – REF. NO. EPA-650/1-74-001
Combustion Engineering, Inc. Windsor, CT – REF. NO. EPA-650/2-73-005
Commonwealth of Pennsylvania Harrisburg, PA – REF. NO. EPA-600/5-74-022
Cone Mills Corporation Greensboro, NC – REF. NO. EPA-660/2-74-039
Consolidation Coal Company, Incorporated, Research Division Library, PA – REF. NO. EPA-650/2-73-049
Consultec, Inc. Rockville, MD – REF. NO. EPA-670/2-73-069
Continental Can Company Hodge, LA – REF. NO. EPA-660/2-74-008
Control Data Corporation Minneapolis, MN – REF. NO. EPA-650/4-74-051
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-73-012
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-73-029
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-73-031
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-73-038
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-73-046
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-73-053
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-74-003
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-74-126a
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-74-126b
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-75-010a
Control Systems Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/2-75-010b
Copley International Corporation La Jolla, CA – REF. NO. EPA-650/5-73-001
Cornell University Ithaca, NY – REF. NO. EPA-660/2-74-063
Cottrell Environmental Systems, Inc. Division of Research-Cottrell, Inc. Bound Brook, NJ – REF. NO. EPA-650/2-74-053
Crown Mine Drainage Control Field Site, EPA Rivesville, WV – REF. NO. EPA-670/2-73-100
Crown Zellerbach Corporation Camas, WA – REF. NO. EPA-660/2-73-028
Culligan International Company Northbrook, IL – REF. NO. EPA-660/2-74-007
Curran Associates, Inc. Northampton, MA – REF. NO. EPA-670/2-74-037
Curran Associates, Inc. Northampton, MA – REF. NO. EPA-670/2-74-038
Curran Associates, Inc. Northampton, MA – REF. NO. EPA-670/2-74-065
Curran Associates, Inc. Northampton, MA – REF. NO. EPA-670/2-74-066
Curran Associates, Inc. Northampton, MA – REF. NO. EPA-670/2-74-068
Cyrus Wm. Rice Division, NUS Corporation Pittsburgh, PA – REF. NO. EPA-670/2-73-054
Cyrus Wm. Rice Division, NUS Corporation Pittsburgh, PA – REF. NO. EPA-670/2-73-081
Cyrus Wm. Rice Division, NUS Corporation Pittsburgh, PA – REF. NO. EPA-670/2-74-003
D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC – REF. NO. EPA-670/2-73-040
D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC – REF. NO. EPA-670/2-73-058
D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC – REF. NO. EPA-670/2-73-073
D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC – REF. NO. EPA-670/2-73-075
D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC – REF. NO. EPA-670/2-73-033
D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC – REF. NO. EPA-670/2-73-037
D.C. Pilot Plant, EPA, and D.C. Department of Environmental Services Washington, DC – REF. NO. EPA-670/2-73-070
Dartmouth College Hanover, NH – REF. NO. EPA-670/2-73-011
Dartmouth College Hanover, NH – REF. NO. EPA-600/5-74-027

# PERFORMING ORGANIZATION INDEX

Data Metric Corporation McLean, VA – REF. NO. EPA-600/5–73–011
David M. Dornbusch and Company San Francisco, CA – REF. NO. EPA-600/5–73–005
Dayton Research Institute, University of Dayton, OH – REF. NO. EPA-670/2–75–033a
Dayton Research Institute, University of Dayton, OH – REF. NO. EPA-670/2–75–033b
Dayton Research Institute, University of Dayton, OH – REF. NO. EPA-670/2–75–033c
Dayton Research Institute, University of Dayton, OH – REF. NO. EPA-670/2–75–033d
De Laureal Engineers, Inc. New Orleans, LA – REF. NO. EPA-670/2–73–024
De Laureal Engineers, Inc. New Orleans, LA – REF. NO. EPA-670/2–73–074
Delaware River Basin Commission Trenton, NJ – REF. NO. EPA-660/2–73–038
DelMonte Corporation San Francisco, CA – REF. NO. EPA-660/2–74–092
Denver, University of Denver, CO – REF. NO. EPA-670/2–73–080
Detroit Metro Water Department Detroit, MI – REF. NO. EPA-670/2–75–020
Development Planning and Research Associates, Inc. Manhattan, KS – REF. NO. EPA-600/5–73–008a
Development Planning and Research Associates, Inc. Manhattan, KS – REF. NO. EPA-600/5–73–008b
Development Planning and Research Associates, Inc. Manhattan, KS – REF. NO. EPA-600/5–74–014
Development Planning and Research Associates, Inc. Manhattan, KS – REF. NO. EPA-600/5–74–028
Diamond Shamrock Corporation, T. R. Evans Research Center Painesville, OH – REF. NO. EPA-600/2–74–006
Dominque, Szabo and Associates, Inc. Lafayette, LA – REF. NO. EPA-660/2–74–061
Dow Chemical Company Freeport, TX – REF. NO. EPA-660/3–73–006
Dow Chemical Company Midland, MI – REF. NO. EPA-650/2–74–060
Dow Chemical Company Midland, MI – REF. NO. EPA-650/2–74–061
Dow Chemical Company Freeport, TX – REF. NO. EPA-660/3–74–019
Dow Chemical Company Freeport, TX – REF. NO. EPA-650/2–75–032a
Dow Chemical Company Freeport, TX – REF. NO. EPA-650/2–75–032b
Dow Chemical Company Freeport, TX – REF. NO. EPA-650/2–75–032c
Drexel University, Environmental Engineering Program Philadelphia, PA – REF. NO. EPA-670/2–73–057
Dugway Proving Ground Dugway, UT – REF. NO. EPA-680/4–75–003
E.D. Appolonia Consulting Engineers, Inc. Pittsburgh, PA – REF. NO. EPA-670/2–73–081
East Central Oklahoma State University Ada, OK – REF. NO. EPA-660/2–75–003
East Central State College Ada, OK – REF. NO. EPA-660/2–74–024
East Tennessee State University Johnson City, TN – REF. NO. EPA-670/2–75–023
Eastern Michigan University Ypsilanti, MI – REF. NO. EPA-660/3–74–029
Eastern Municipal Water District Hemet, CA – REF. NO. EPA-670/2–74–077
Eastern Municipal Water District Hemet, CA – REF. NO. EPA-670/2–75–027
Ecotrol, Inc. Columbia, MD – REF. NO. EPA-670/2–74–023
Edison Water Quality Laboratory, EPA Edison, NJ – REF. NO. EPA-670/2–73–059
Edison Water Quality Laboratory, EPA Edison, NJ – REF. NO. EPA-670/2–73–077
Elson T. Killam Associates, Inc. Milburn, NJ – REF. NO. EPA-670/2–73–071
Engineering Science, Inc. Berkeley, CA – REF. NO. EPA-670/2–75–037
Engineering-Science, Inc. McLean, VA – REF. NO. EPA-650/2–74–077
Engineering-Science, Inc. McLean, VA – REF. NO. EPA-650/2–75–026a
Engineering-Science, Inc. McLean, VA – REF. NO. EPA-650/2–75–026b
Envirex, Inc. Milwaukee, WI – REF. NO. EPA-660/2–73–037
Envirex, Inc. Milwaukee, WI – REF. NO. EPA-670/2–74–025
Enviro Plan, Inc. College Park, MD – REF. NO. EPA-600/2–73–004
Enviro-System and Research, Inc. Roanoke, VA – REF. NO. EPA-650/2–74–058
Envirogenics Company, Division of Aerojet-General Corporation El Monte, CA – REF. NO. EPA-660/2–74–036
Environics, Inc. Huntington Beach, CA – REF. NO. EPA-670/2–75–028
Environmental Control Technology Corporation Ann Arbor, MI – REF. NO. EPA-670/2–75–062
Environmental Impact Center Newton, MA – REF. NO. EPA-600/5–75–002
Environmental Law Institute Washington, DC – REF. NO. EPA-600/5–74–025
Environmental Law Institute Washington, DC – REF. NO. EPA-600/5–74–026
Environmental Measurements, Inc. San Francisco, CA – REF. NO. EPA-650/2–75-005a
Environmental Measurements, Inc. San Francisco, CA – REF. NO. EPA-650/2–75–005b
Environmental Quality Systems, Inc. Rockville, MD – REF. NO. EPA-670/2–74–013
Environmental Quality Systems, Inc. Rockville, MD – REF. NO. EPA-670/2–74–097
Environmental Quality Systems, Inc. Rockville, MD – REF. NO. EPA-670/2–75–056
Environmental Research Institute of Michigan Ypsilanti, MI – REF. NO. EPA-660/3–74–028
Environmental Science and Engineering, Inc. Gainesville, FL – REF. NO. EPA-650/2–73–007
Environmental Science and Engineering, Inc. Gainesville, FL – REF. NO. EPA-670/2–75–063
Environmental Studies Division, EPA Washington, DC – REF. NO. EPA-600/5–75–011
Environmental Systems Corporation Knoxville, TN – REF. NO. EPA-660/2–73–011
Environmental Systems Laboratory, Inc. Sunnyvale, CA – REF. NO. EPA-660/2–73–003
Environmental Systems Laboratory, Inc. Sunnyvale, CA – REF. NO. EPA-650/4–74–043

# PERFORMING ORGANIZATION INDEX

Esso Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–001
Esso Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–009a
Esso Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–009b
Esso Research and Engineering Company Berkshire, England – REF. NO. EPA-650/2–74–109
Esso Research and Engineering Company Linden, NJ – REF. NO. EPA-670/2–74–004
Esso Research Company Linden, NJ – REF. NO. EPA-650/2–73–039
Eugene Water and Electric Board Eugene, OR – REF. NO. EPA-660/2–74–011
Exxon Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–009c
Exxon Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–009d
Exxon Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–009e
Exxon Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–009f
Exxon Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–009g
Exxon Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–066
Exxon Research and Engineering Company Linden, NJ – REF. NO. EPA-650/2–74–069
Family and Foods, Inc. Denison, IA – REF. NO. EPA-660/2–74–027
Fecker Systems, Owens-Illinois, Inc. Pittsburgh, PA – REF. NO. EPA-650/2–75–008
Firestone Synthetic Rubber and Latex Company Lake Charles, Louisiana – REF. NO. EPA-660/2–73–018
Fitzsimmons Steel Company Youngstown, OH – REF. NO. EPA-660/2–73–032
Florida Atlantic University Boca Raton, FL – REF. NO. EPA-660/3–74–007
Florida Technological University Orlando, FL – REF. NO. EPA-670/2–74–072
Florida, University of Gainesville, FL – REF. NO. EPA-660/3–73–002
Florida, University of Gainesville, FL – REF. NO. EPA-670/2–73–063
Florida, University of Gainesville, FL – REF. NO. EPA-600/5–74–013
Florida, University of Gainesville, FL – REF. NO. EPA-660/2–74–021
Florida, University of Gainesville, FL – REF. NO. EPA-670/2–75–017
Florida, University of Gainesville, FL – REF. NO. EPA-670/2–75–022
Flow Research, Inc. Kent, WA – REF. NO. EPA-650/4–74–044
Flynn and Emrich Company Baltimore, MD – REF. NO. EPA-650/2–74–004
Ford Motor Company Dearborn, MI – REF. NO. EPA-650/2–74–076
Foster D. Snell, Inc. Florham Park, NJ – REF. NO. EPA-670/2–73–062
Foster D. Snell, Inc. Florham Park, NJ – REF. NO. EPA-650/2–74–106
Foster-Miller Associates, Inc. Waltham, MA – REF. NO. EPA-670/2–74–019
Foster-Miller Associates, Inc. Waltham, MA – REF. NO. EPA-670/2–74–020
Foster-Miller Associates, Inc. Waltham, MA – REF. NO. EPA-670/2–74–021
Fram Corporation Pawtucket, RI – REF. NO. EPA-660/2–74–039
Franklin Institute Research Laboratories Philadelphia, PA – REF. NO. EPA-650/2–73–016
Franklin Institute Research Laboratories Philadelphia, PA – REF. NO. EPA-600/2–74–005
Franklin Institute Research Laboratories Philadelphia, PA – REF. NO. EPA-600/2–75–005
Franklin Institute Research Laboratories Philadelphia, PA – REF. NO. EPA-650/2–75–029
Franklin Institute Research Laboratory Philadelphia, PA – REF. NO. EPA-600/2–74–007
FMC Corporation Itasca, IL – REF. NO. EPA-670/2–75–045
FMC Corporation, Advanced Products Division San Jose, CA – REF. NO. EPA-670/2–74–056
Gainesville, City of Gainesville, FL – REF. NO. EPA-660/2–74–055
General American Transportation Corporation Niles, IL – REF. NO. EPA-670/2–74–043
General American Transportation Corporation Niles, IL – REF. NO. EPA-670/2–75–007
General Dynamics Corporation San Diego, CA – REF. NO. EPA-650/2–73–026
General Dynamics Corporation Groton, CT – REF. NO. EPA-670/2–74–071
General Electric Company Philadelphia, PA – REF. NO. EPA-650/2–74–029
General Electric Company Pittsfield, MA – REF. NO. EPA-650/2–74–046a
General Electric Company Pittsfield, MA – REF. NO. EPA-650/2–74–046b
General Electric Company Philadelphia, PA – REF. NO. EPA-660/3–74–022
General Electric Company, Center for Advanced Studies, TEMPO Santa Barbara, CA – REF. NO. EPA-600/4–73–0
General Electric Company, Center for Advanced Studies, TEMPO Santa Barbara, CA – REF. NO. EPA-600/4–73–001
General Electric Company, Center for Advanced Studies, TEMPO Santa Barbara, CA – REF. NO. EPA-600/4–74–001
General Electric Company, Space Sciences Laboratory Philadelphia, PA – REF. NO. EPA-650/2–73–040
General Electric Company, Tempo, Center for Advanced Studies Santa Barbara, CA – REF. NO. EPA-680/4–74–002
General Electric Company, Tempo, Center for Advanced Studies Santa Barbara, CA – REF. NO. EPA-680/4–74–003
Geomet, Inc. Rockville, MD – REF. NO. EPA-650/2–73–052
Geomet, Inc. Gaithersburg, MD – REF. NO. EPA-650/4–74–049
Geomet, Inc. Pomona, CA – REF. NO. EPA-650/2–75–028
Georgetown University Washington, DC – REF. NO. EPA-600/5–74–020
Georgia Pacific Corporation Bellingham, WA – REF. NO. EPA-660/2–74–086
Georgia State University Atlanta, GA – REF. NO. EPA-660/3–75–001
Georgia, University of Athens, GA – REF. NO. EPA-660/3–73–016

# PERFORMING ORGANIZATION INDEX

Georgia, University of Athens, GA – REF. NO. EPA-660/3–73–022
Georgia, University of Athens, GA – REF. NO. EPA-660/3–73–025
Georgia, University of Athens, GA – REF. NO. EPA-660/2–74–064
Georgia, University of Athens, GA – REF. NO. EPA-660/4–75–002
Geraghty and Miller, Inc. Port Washington, NY – REF. NO. EPA-600/4–73–001a
Geraghty and Miller, Inc. Port Washington, NY – REF. NO. EPA-660/2–74–056
Geraghty and Miller, Inc. Port Washington, NY – REF. NO. EPA-660/3–75–018
Gillette Research Institute Rockville, MD – REF. NO. EPA-670/2–73–052
Gillette Research Institute Rockville, MD – REF. NO. EPA-600/2–74–003
Gold Kist, Inc. Durham, NC – REF. NO. EPA-660/2–74–031
Gram/Phillips Associates, Inc. Water District Calabasas, CA – REF. NO. EPA-660/2–73–022
Grand Rapids, City of Grand Rapids, MI – REF. NO. EPA-670/2–73–103
Grosse Ile Laboratory, EPA Grosse Ile, MI – REF. NO. EPA-660/3–73–021
Grumman Aerospace Corporation Bethpage, NY – REF. NO. EPA-660/2–73–024
Gulf Breeze Environmental Research Laboratory Gulf Breeze, FL – REF. NO. EPA-660/3–74–024
Gulf Breeze Environmental Research Laboratory, EPA Gulf Breeze, FL – REF. NO. EPA-660/3–74–013
Gulf Breeze Environmental Research Laboratory, EPA Gulf Breeze, FL – REF. NO. EPA-660/3–75–001
Gulf Environmental Systems Company San Diego, CA – REF. NO. EPA-670/2–75–009
Gulf South Research Institute Baton Rouge, LA – REF. NO. EPA-670/2–73–021
Gulf South Research Institute New Iberia, LA – REF. NO. EPA-650/2–74–068
Gulf Southern Research Institute for Pharmaceutical Associates Washington, DC – REF. NO. EPA-670/2–74–057
GCA Corporation Bedford, MA – REF. NO. EPA-600/5–74–032
GCA Corporation Bedford, MA – REF. NO. EPA-650/2–74–036
GCA Corporation Bedford, MA – REF. NO. EPA-650/2–74–043
GCA Corporation Bedford, MA – REF. NO. EPA-650/2–74–082a
GCA Corporation Bedford, MA – REF. NO. EPA-650/2–75–009
GCA Corporation Bedford, MA – REF. NO. EPA-650/2–75–024a
Hancock Company Bay St. Louis, MS – REF. NO. EPA-670/2–74–073
Harriman Utility Board Harriman, TN – REF. NO. EPA-660/2–73–010
Harvard University Cambridge, MA – REF. NO. EPA-600/1–75–002
Harvard University School of Public Health Boston, MA – REF. NO. EPA-670/2–73–017
Harvard University, Guggenheim Center for Aerospace Health and Safety, Boston, MA – REF. NO. EPA-650/1–74–006
Hittman Associates, Inc. Columbia, MD – REF. NO. EPA-600/2–73–002
Hittman Associates, Inc. Columbia, MD – REF. NO. EPA-660/2–73–004
Hittman Associates, Inc. Columbia, MD – REF. NO. EPA-660/2–73–035
Hittman Associates, Inc. Columbia, MD – REF. NO. EPA-660/2–74–072
Hittman Associates, Inc. Columbia, MD – REF. NO. EPA-660/2–74–073
Hoerner Waldorf Corporation St. Paul, MN – REF. NO. EPA-650/2–74–071a
Hoerner Waldorf Corporation St. Paul, MN – REF. NO. EPA-650/2–74–071b
Homer Hoyt Institute Washington, DC – REF. NO. EPA-600/5–73–012a
Homer Hoyt Institute Washington, DC – REF. NO. EPA-600/5–73–012b
Homer Hoyt Institute Washington, DC – REF. NO. EPA-600/5–73–012c
Homer Hoyt Institute Washington, DC – REF. NO. EPA-600/5–73–012d
Homer Hoyt Institute Washington, DC – REF. NO. EPA-600/5–73–012e
Hope College Holland, MI – REF. NO. EPA-660/2–73–008
Human Resources Research Organization Columbus, GA – REF. NO. EPA-670/2–73–086
Human Studies Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/1–74–004
Hydrocarbon Research, Inc. Trenton, NJ – REF. NO. EPA-650/2–73–041
Hydrocarbon Research, Inc. Trenton, NJ – REF. NO. EPA-650/2–73–041a
Hydrocarbon Research, Incorporated, Research and Development Laboratory Trenton, NJ – REF. NO. EPA-670/2–73–066
Hydrocomp, Inc. Palo Alto, CA – REF. NO. EPA-660/2–74–013
Idaho, University of Moscow, ID – REF. NO. EPA-660/3–73–017
Illinois Environmental Protection Agency Chicago, IL – REF. NO. EPA-660/3–74–002
Illinois Institute of Technology Chicago, IL – REF. NO. EPA-600/2–74–009a
Illinois Institute of Technology Chicago, IL – REF. NO. EPA-600/2–74–009b
Illinois Institute of Technology Chicago, IL – REF. NO. EPA-600/2–74–009c
Illinois State Geological Survey Urbana, IL – REF. NO. EPA-650/2–73–044
Illinois State Geological Survey Springfield, IL – REF. NO. EPA-650/2–74–054
Illinois, University of Urbana, IL – REF. NO. EPA-670/2–73–082
Illinois, University of School of Chemical Sciences Urbana, IL – REF. NO. EPA-650/2–74–063
Illinois, University of Urbana, IL – REF. NO. EPA-670/2–74–035a
Illinois, University of Urbana, IL – REF. NO. EPA-670/2–74–035b
Illinois, University of Urbana, IL – REF. NO. EPA-670/2–74–036a
Illinois, University of Urbana, IL – REF. NO. EPA-670/2–74–036b

# PERFORMING ORGANIZATION INDEX

Illinois, University of, Department of Civil Engineering  Urbana, IL – REF. NO. EPA-670/2–74–016
Illinois, University of, Illinois Natural History Survey  Urbana, IL – REF. NO. EPA-660/3–74–025
Illinois, University of, Illinois State Water Survey  Urbana, IL – REF. NO. EPA-670/2–73–029
Industrial Bio-Test Laboratories, Inc.  Northbrook, IL – REF. NO. EPA-670/2–75–004
Industrial Nucleonics Corporation  Columbus, OH – REF. NO. EPA-650/2–74–065
Industrial Pollution Control Division, EPA  Washington, DC – REF. NO. EPA-600/2–75–001
Industrial Waste Treatment Research Laboratory, EPA  Rivesville, WV – REF. NO. EPA-670/2–74–051
Industrial Waste Treatment Research Laboratory, EPA  Cincinnati, OH – REF. NO. EPA-670/2–74–093
Institute for Community Studies  Kansas City, MO – REF. NO. EPA-600/5–74–024
Institute for Policy Analysis  La Jolla, CA – REF. NO. EPA-600/5–75–010
Institute of Gas Technology, IIT Center  Chicago, IL – REF. NO. EPA-650/2–73–004
Institute of Gas Technology, IIT Center  Chicago, IL – REF. NO. EPA-650/2–73–033a
Institute of Gas Technology, IIT Center  Chicago, IL – REF. NO. EPA-650/2–73–033b
Institute of Paper Chemistry  Appleton, WI – REF. NO. EPA-660/2–73–030
Institute of Paper Chemistry  Appleton, WI – REF. NO. EPA-660/2–74–029
International City Management Association  Washington, DC – REF. NO. EPA-600/5–73–016
International Research and Technology Corporation  Washington, DC – REF. NO. EPA-670/2–73–056
International Research and Technology Corporation  Arlington, VA – REF. NO. EPA-670/2–74–078
Iowa State University  Ames, IA – REF. NO. EPA-660/2–74–009
Iowa State University, Department of Agricultural Engineering  Ames, IA – REF. NO. EPA-670/2–73–025
IIT Research Institute  Chicago, IL – REF. NO. EPA-650/1–73–002
IIT Research Institute  Chicago, IL – REF. NO. EPA-650/2–74–016
IIT Research Institute  Chicago, IL – REF. NO. EPA-650/2–74–088
IIT Research Institute  Chicago, IL – REF. NO. EPA-650/2–74–090
IRT Corporation  San Diego, CA – REF. NO. EPA-650/1–75–004
Jack Faucett Company  Chevy Chase, MD – REF. NO. EPA-600/5–74–033
JRB Associates, Inc.  La Jolla, CA – REF. NO. EPA-650/4–74–006
Kaman Sciences Corporation  Colorado Springs, CO – REF. NO. EPA-650/4–75–005
Kansas State University  Manhattan, KS – REF. NO. EPA-650/2–74–084
Kansas State University  Manhattan, KS – REF. NO. EPA-650/2–74–110
Kansas State University  Manhattan, KS – REF. NO. EPA-660/2–75–010
Kansas State University  Manhattan, KS – REF. NO. EPA-660/2–75–013
Karolinska Institute  Stockholm, Sweden – REF. NO. EPA-650/2–75–049
Kenosha, City of  Kenosha, WI – REF. NO. EPA-670/2–75–019
Kent Cheese Company  Melrose Park, IL – REF. NO. EPA-660/2–74–012
Kentucky, University of, Department of Entomology  Lexington, KY – REF. NO. EPA-650/1–74–002
KLD Associates, Inc.  Huntington, NY – REF. NO. EPA-650/2–75–018
KVB Engineering, Inc.  Tustin, CA – REF. NO. EPA-650/2–74–078a
Lake Herman Development Associates, Inc.  Madison, SD – REF. NO. EPA-660/3–74–017
Lake Tahoe Area Council  South Lake Tahoe, CA – REF. NO. EPA-660/3–75–003
Lancy Laboratories  Zelienople, PA – REF. NO. EPA-670/2–75–015
Langston Laboratories, Inc.  Leawood, KS – REF. NO. EPA-650/2–75–007
Lawrence Berkeley Laboratories  Berkeley, CA – REF. NO. EPA-650/4–74–030
Lawrence Berkeley Laboratory  Berkeley, CA – REF. NO. EPA-650/2–75–048
Lockheed Missiles and Space Company, Inc.  Sunnyvale, CA – REF. NO. EPA-650/3–74–004a
Los Angles County Sanitation District  Los Angeles, CA – REF. NO. EPA-670/2–73–043
Louisiana State University  Baton Rouge, LA – REF. NO. EPA-600/5–75–006
Louisiana State University  Baton Rouge, LA – REF. NO. EPA-660/3–75–001
Louisiana State University  Baton Rouge, LA – REF. NO. EPA-670/2–75–032
Louisiana State University, Department of Chemistry  Baton Rouge, LA – REF. NO. EPA-650/2–73–011
Louisiana State Unversity, Department of Chemical Engineering  Baton Rouge, LA – REF. NO. EPA-670/2–73–095
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–74–012
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–74–028
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–74–072
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–74–098
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–74–116
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–74–127
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–74–130
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–75–017
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–75–030
M. W. Kellogg Company  Houston, TX – REF. NO. EPA-650/2–75–033
Manhattan College  Bronx, NY – REF. NO. EPA-660/3–73–009
Manhattan College  Bronx, NY – REF. NO. EPA-660/3–75–005
Maryland, State of, Department of Health and Mental Hygiene  Baltimore, MD – REF. NO. EPA-660/2–74–060

# PERFORMING ORGANIZATION INDEX

Maryland, State of, Water Resources Administration Annapolis, MD – REF. NO. EPA-660/2-73-035
Maryland, State of, Water Resources Administration Annapolis, MD – REF. NO. EPA-660/2-74-071
Massachusetts Institute of Technology Cambridge, MA – REF. NO. EPA-650/2-74-075
Massachusetts Institute of Technology Cambridge, MA – REF. NO. EPA-670/2-75-026a
Massachusetts Institute of Technology Cambridge, MA – REF. NO. EPA-670/2-75-026b
Massachusetts Institute of Technology Cambridge, MA – REF. NO. EPA-670/2-75-040
Massachusetts Institute of Technology, Chemical Engineering Department Cambridge, MA – REF. NO. EPA-670/2-73-089A
Massachusetts Institute of Technology, Chemical Engineering Department Cambridge, MA – REF. NO. EPA-670/2-73-089B
Massachusetts Institute of Technology, Department of Chemical Engineering Cambridge, MA – REF. NO. EPA-650/2-73-047
Mathematica, Inc. Bethesda, MD – REF. NO. EPA-600/5-74-008
Medical College of Wisconsin, Department of Environmental Medicine Milwaukee, WI – REF. NO. EPA-650/1-73-004
Medical College of Wisconsin, Department of Environmental Medicine Milwaukee, WI – REF. NO. EPA-650/1-74-005
Meloy Laboratiries, Inc. Springfield, VA – REF. NO. EPA-650/1-75-005
Meloy Laboratories, Inc. Springfield, VA – REF. NO. EPA-670/2-73-068
Messer Associates, Inc. Silver Spring, MD – REF. NO. EPA-670/2-74-082
Meta Systems, Inc. Cambridge, MA – REF. NO. EPA-600/5-74-030
Meta Systems, Inc. Cambridge, MA – REF. NO. EPA-600/5-75-001
Metcalf and Eddy, Inc. Palo Alto, CA – REF. NO. EPA-660/2-73-006a
Metcalf and Eddy, Inc. Palo Alto, CA – REF. NO. EPA-660/2-73-006b
Metcalf and Eddy, Inc. Boston, MA – REF. NO. EPA-660/2-73-036
Metcalf and Eddy, Inc. Palo Alto, CA – REF. NO. EPA-670/2-74-040
Meteorology Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/4-74-008
Meteorology Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/4-75-004
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-74-001
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-74-002
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/9-74-005
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-75-001
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-75-002
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-75-003
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-75-004a
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-75-004b
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-75-005
Methods Development and Quality Assurance Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/4-75-006
Metropolitan Sewer Board St. Paul, MN – REF. NO. EPA-660/2-74-020
Miami, University of Coral Gables, FL – REF. NO. EPA-650/1-74-012
Miami, University of Coral Gables, FL – REF. NO. EPA-660/3-74-003
Miami, University of Miami, FL – REF. NO. EPA-650/1-75-002
Miami, University of, School of Medicine Miami, FL – REF. NO. EPA-650/1-74-009
Michael Baker Jr., Inc. Beaver, PA – REF. NO. EPA-670/2-74-009
Michigan State University East Lansing, MI – REF. NO. EPA-600/5-74-011
Michigan State University East Lansing, MI – REF. NO. EPA-660/2-74-057
Michigan State University East Lansing, MI – REF. NO. EPA-670/2-74-076a
Michigan State University East Lansing, MI – REF. NO. EPA-670/2-74-076b
Michigan Technological University Houghton, MI – REF. NO. EPA-660/2-74-018
Michigan, University of Ann Arbor, MI – REF. NO. EPA-670/2-73-049
Michigan, University of Ann Arbor, MI – REF. NO. EPA-650/1-74-007
Michigan, University of Ann Arbor, MI – REF. NO. EPA-650/2-74-096
Michigan, University of Ann Arbor, MI – REF. NO. EPA-660/3-75-004
Michigan, University of Ann Arbor, MI – REF. NO. EPA-670/2-75-046
Michigan, University of Ann Arbor, MI – REF. NO. EPA-670/2-75-061
Michigan, University of, College of Engineering Ann Arbor, MI – REF. NO. EPA-670/2-74-012
Michigan, University of, Department of Naval Architecture and Marine Engineering Ann Arbor, MI – REF. NO. EPA-670/2-74-054
Michigan, University of, Environmental and Water Resources Engineering Ann Arbor, MI – REF. NO. EPA-670/2-74-047
Middlebury College, Physics Department Middlebury, VT – REF. NO. EPA-670/2-74-031
Midwest Research Institute Kansas City, MO – REF. NO. EPA-600/5-74-007
Midwest Research Institute Kansas City, MO – REF. NO. EPA-650/2-74-027
Midwest Research Institute Kansas City, MO – REF. NO. EPA-650/2-74-073
Midwest Research Institute Kansas City, MO – REF. NO. EPA-650/2-74-107
Midwest Research Institute Kansas City, MO – REF. NO. EPA-650/4-74-019a
Midwest Research Institute Kansas City, MO – REF. NO. EPA-650/4-74-023
Midwest Research Institute Kansas City, MO – REF. NO. EPA-650/4-74-046
Midwest Research Institute Kansas City, MO – REF. NO. EPA-660/2-74-047
Midwest Research Institute Kansas City, MO – REF. NO. EPA-660/2-74-094
Midwest Research Institute Kansas City, MO – REF. NO. EPA-670/2-74-048

# PERFORMING ORGANIZATION INDEX

Midwest Research Institute  Kansas City, MO – REF. NO. EPA-600/5–75–004
Midwest Research Institute  Kansas City, MO – REF. NO. EPA-650/2–75–044
Midwest Research Institute  Kansas City, MO – REF. NO. EPA-650/4–75–001
Midwest Research Institute  Kansas City, MO – REF. NO. EPA-650/4–75–011
Midwest Research Institute  Kansas City, MO – REF. NO. EPA-670/2–75–057
Milbrew, Inc.  Juneau, WI – REF. NO. EPA-660/2–74–025
Milwaukee, Sewerage Commission of the City of  Milwaukee, WI – REF. NO. EPA-670/2–73–050
Mineral Pigments, Corporation  Beltsville, MD – REF. NO. EPA-670/2–74–044
Minnesota, University of  St. Paul, MN – REF. NO. EPA-660/2–73–027
Minnesota, University of  St. Paul, MN – REF. NO. EPA-670/2–73–051
Minnesota, University of  St. Paul, MN – REF. NO. EPA-660/2–75–012
Minnesota, University of  Minneapolis, MN – REF. NO. EPA-660/3–75–014
Minnesota, University of  St. Paul, MN – REF. NO. EPA-660/3–75–017
Minnesota, University of, Division of Environmental Health  Minneapolis, MN – REF. NO. EPA-670/5–73–020
Minnesota, University of, School of Public Health  Minneapolis, MN – REF. NO. EPA-670/5–74–001
Minnesota, University of, Division of Environmental Health  Minneapolis, MN – REF. NO. EPA-670/2–73–048
Mississippi State University  Jackson, MS – REF. NO. EPA-660/3–75–024
Missouri, University of  Columbia, MO – REF. NO. EPA-660/2–74–068
Missouri, University of  Rolla, MO – REF. NO. EPA-670/2–75–053
Missouri, University of, Department of Civil Engineering  Rolla, MO – REF. NO. EPA-670/2–73–038
Mitre Corporation  Washington, DC – REF. NO. EPA-600/2–74–004
Mitre Corporation  McLean, VA – REF. NO. EPA-650/2–74–030
Mitre Corporation  McLean, VA – REF. NO. EPA-650/2–74–062
Mitre Corporation  McLean, VA – REF. NO. EPA-650/2–74–062a
Mitre Corporation  McLean, VA – REF. NO. EPA-600/2–75–007a
Mitre Corporation  McLean, VA – REF. NO. EPA-600/2–75–007b
Mitre Corporation  McLean, VA – REF. NO. EPA-600/2–75–011
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–73–027
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–74–021
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–74–041
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–74–055
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–74–082
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–74–117
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–74–131
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–75–019a
Monsanto Research Corporation  Dayton, OH – REF. NO. EPA-650/2–75–046
Montana, University of  Missoula, MT – REF. NO. EPA-660/3–74–023
Montana, University of, Wood Chemistry Laboratory  Missoula, MT – REF. NO. EPA-670/2–74–015
Mount Clemens, City of  Mount Clemens, MI – REF. NO. EPA-670/2–75–010
National Bureau of Standards  Washington, DC – REF. NO. EPA-600/5–73–012a
National Bureau of Standards  Washington, DC – REF. NO. EPA-600/5–74–031
National Canners Association  Berkeley, CA – REF. NO. EPA-660/2–74–091
National Center for Resource Recovery, Inc.  Washington, DC – REF. NO. EPA-670/2–75–034
National Ecological Research Laboratory, EPA  Corvallis, OR – REF. NO. EPA-660/3–74–011
National Ecological Research Laboratory, EPA  Corvallis, OR – REF. NO. EPA-660/3–74–012
National Ecological Research Laboratory, EPA  Corvallis, OR – REF. NO. EPA-660/3–74–018
National Ecological Research Laboratory, EPA  Corvallis, OR – REF. NO. EPA-660/3–74–024
National Environmental Research Center, Analytical Quality Control Laboratory  Cincinnati, OH – REF. NO. EPA-670/4–73–013
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/2–73–017
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/2–73–018
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/2–73–021
National Environmental Research Center, EPA  Cincinnati, OH – REF. NO. EPA-670/1–73–036
National Environmental Research Center, EPA  Cincinnati, OH – REF. NO. EPA-670/4–73–001
National Environmental Research Center, EPA  Las Vegas, NV – REF. NO. EPA-680/4–73–002
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/2–74–013
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/2–74–035
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/2–74–050
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/2–74–081
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/3–74–001
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/4–74–002
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/4–74–031
National Environmental Research Center, EPA  Research Triangle Park, NC – REF. NO. EPA-650/4–74–034
National Environmental Research Center, EPA  Corvallis, OR – REF. NO. EPA-660/9–74–002
National Environmental Research Center, EPA  Cincinnati, OH – REF. NO. EPA-670/2–74–069

# PERFORMING ORGANIZATION INDEX

National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/2–74–088
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/2–74–090
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/4–74–006
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/4–74–007
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/4–74–008
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/4–74–009
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/5–74–005
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/9–74–001
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/9–74–002
National Environmental Research Center, EPA Las Vegas, NV – REF. NO. EPA-680/4–74–001
National Environmental Research Center, EPA Corvallis, OR – REF. NO. EPA-660/3–75–008
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/2–75–051
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/2–75–052
National Environmental Research Center, EPA Cincinnati, OH – REF. NO. EPA-670/9–75–005
National Environmental Research Center, EPA Las Vegas, NV – REF. NO. EPA-680/1–75–001
National Environmental Research Center, EPA Las Vegas, NV – REF. NO. EPA-680/4–75–001
National Environmental Research Center, EPA Las Vegas, NV – REF. NO. EPA-680/4–75–002b
National Environmental Research Center, EPA Las Vegas, NV – REF. NO. EPA-680/4–75–003
National Environmental Research Center, Office of Program Coordination Cincinnati, OH – REF. NO. EPA-670/5–73–012
National Environmental Research Center, Office of Research and Development Cincinnati, OH – REF. NO. EPA-670/9–73–056
National Environmental Research Center, Program Coordination Staff Cincinnati, OH – REF. NO. EPA-670/1–74–001
National Environmental Research Center, Quality Assurance Branch, EPA, Las Vegas, NV – REF. NO. EPA-680/4–73–001A
National Environmental Research Center, Technical Information Office Cincinnati, OH – REF. NO. EPA-670/9–73–004
National Environmental Research Center, Technical Information Office Cincinnati, OH – REF. NO. EPA-670/9–73–055
National Environmental Research Center, Technical Information Staff Cincinnati, OH – REF. NO. EPA-670/9–74–004
National Marine Water Quality Laboratory, EPA Narragansett, RI – REF. NO. EPA-660/3–75–023
National Research Corporation Billerica, MA – REF. NO. EPA-650/2–75–013a
National Steel Corporation, Weirton Steel Division Weirton, WV – REF. NO. EPA-650/2–73–028
National Water Quality Laboratory, EPA Duluth, MN – REF. NO. EPA-660/3–75–009
Naval Research Laboratory Washington, DC – REF. NO. EPA-650/2–73–006
Naval Research Laboratory Washington, DC – REF. NO. EPA-650/2–75–004
Nebraska, University of Omaha, NB – REF. NO. EPA-650/1–75–003
New Hampshire, University of Durham, NH – REF. NO. EPA-660/3–74–031
New Jersey Zinc Company Palmerton, PA – REF. NO. EPA-670/2–75–016
New York State Atomic and Space Development Authority New York, NY – REF. NO. EPA-670/2–74–080
New York University, Chemistry Department New York, NY – REF. NO. EPA-650/1–74–010
New York University, School of Engineering New York City, NY – REF. NO. EPA-650/2–73–020
New York University, School of Engineering and Science, Department of Chemical Engineering Bronx, NY – REF. NO. EPA-670/2–73–023
New York, State University of Buffalo, NY – REF. NO. EPA-660/2–74–079
New York, State University of Syracuse, NY – REF. NO. EPA-660/2–74–081
New York, State University of Albany, NY – REF. NO. EPA-650/3–75–003
New York, State University of Albany, NY – REF. NO. EPA-660/3–75–021
New York, University of Buffalo, NY – REF. NO. EPA-660/3–74–027
Noise Technology Staff, EPA Washington, DC – REF. NO. EPA-600/1–75–001
Noise Technology Staff, EPA Washington, DC – REF. NO. EPA-600/2–75–002
Noise Technology Staff, EPA Washington, DC – REF. NO. EPA-600/2–75–003
Noise Technology Staff, EPA Washington, DC – REF. NO. EPA-600/2–75–008
Noise Technology Staff, EPA Washington, DC – REF. NO. EPA-600/2–75–010
North American Rockwell Corporation Canoga Park, CA – REF. NO. EPA-670/2–73–031
North Carolina State University Raleigh, NC – REF. NO. EPA-660/2–73–021
North Carolina State University Raleigh, NC – REF. NO. EPA-650/2–74–095
North Carolina State University Raleigh, NC – REF. NO. EPA-660/2–74–031
North Carolina State University, Department of Animal Science Raleigh, NC – REF. NO. EPA-670/2–73–090
North Carolina State University, Department of Wood and Paper Sciences Raleigh, NC – REF. NO. EPA-650/2–74–005
North Carolina, University of Chapel Hill, NC – REF. NO. EPA-600/5–73–015
North Carolina, University of Chapel Hill, NC – REF. NO. EPA-670/2–73–047a
North Carolina, University of Greensboro, NC – REF. NO. EPA-650/3–74–008
North Carolina, University of Chapel Hill, NC – REF. NO. EPA-650/4–74–038
North Carolina, University of Chapel Hill, NC – REF. NO. EPA-670/2–74–032
North Carolina, University of Raleigh, NC – REF. NO. EPA-670/2–74–096
North Carolina, University of Chapel Hill, NC – REF. NO. EPA-650/9–75–001a
North Carolina, University of Chapel Hill, NC – REF. NO. EPA-650/9–75–001b
North Carolina, University of, Center for Urban and Regional Studies Chapel Hill, NC – REF. NO. EPA-600/5–73–007
North Dakota, University of Grand Forks, ND – REF. NO. EPA-660/3–73–001

# PERFORMING ORGANIZATION INDEX

North Star Research Corporation Minneapolis, MN – REF. NO. EPA-660/2-73-033
Northwest Environmental Technology Laboratory, Inc. Bellevue, WA – REF. NO. EPA-650/2-75-039
Notre Dame, University of Notre Dame, IN – REF. NO. EPA-650/4-74-041
Oak Ridge National Laboratory Oak Ridge, TN – REF. NO. EPA-660/2-74-076
Ocean Systems, Inc. Reston, VA – REF. NO. EPA-670/2-74-053
Oceanic Foundation Waimanalo, HI – REF. NO. EPA-660/3-75-015
Office of Environmental Sciences, EPA Washington, DC – REF. NO. EPA-600/9-75-003
Office of Monitoring Systems, EPA Washington, DC – REF. NO. EPA-600/4-74-004
Office of Monitoring Systems, EPA Washington, DC – REF. NO. EPA-600/4-75-001
Office of Research and Development, Environmental Studies Division, EPA Washington, DC – REF. NO. EPA-600/5-73-010
Office of Research and Development, EPA Washington, DC – REF. NO. EPA-600/9-75-002
Office of Research and Development, Implementation Research Division, EPA Washington, DC – REF. NO. EPA-600/5-73-001
Office of Research and Development, Office of International Affairs Washington, DC – REF. NO. EPA-670/9-74-003
Office of Research and Development, Publications Staff, Office of Program Management, EPA Washington, DC – REF.NO. EPA -600/5-73-002
Office of Research and Development, Science Advisory Board, EPA Washington, DC – REF. NO. EPA-SAB-73-001
Ohio Agricultural Research and Development Center Wooster, OH – REF. NO. EPA-670/2-74-074
Ohio State University Columbus, OH – REF. NO. EPA-660/2-74-023
Ohio State University Research Foundation Columbus, OH – REF. NO. EPA-650/1-73-003
Ohio State University, Department of Entomology Columbus, OH – REF. NO. EPA-660/2-74-032
Oklahoma State University Stillwater, OK – REF. NO. EPA-650/2-74-080
Oklahoma State University Stillwater, OK – REF. NO. EPA-660/2-74-046
Oklahoma State University Stillwater, OK – REF. NO. EPA-660/2-75-009
Oklahoma Water Resources Board Oklahoma City, OK – REF. NO. EPA-660/3-74-033
Oklahoma, University of Norman, OK – REF. NO. EPA-660/2-74-037
Oklahoma, University of Norman, OK – REF. NO. EPA-660/2-74-077
Oklahoma, University of Norman, OK – REF. NO. EPA-660/3-74-006
Oregon State University Corvallis, OR – REF. NO. EPA-660/3-73-020
Oregon State University Corvallis, OR – REF. NO. EPA-600/5-74-017
Oregon State University Corvallis, OR – REF. NO. EPA-670/2-74-027
Oregon State University, School of Forestry Corvallis, OR – REF. NO. EPA-670/2-73-005
OR&D, Publication Staff, EPA Washington, DC – REF. NO. EPA-600/9-74-001
OR&D, Publication Staff, EPA Washington, DC – REF. NO. EPA-600/9-74-002
OR&D, Publications Staff, EPA Washington, DC – REF. NO. EPA-600/9-75-001a
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/2-73-001
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/2-73-016
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/2-73-031
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/2-73-039
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/3-73-013
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/2-74-058
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/2-74-089
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/3-74-015
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/3-74-032
Pacific Northwest Environmental Research Laboratory, EPA Corvallis, OR – REF. NO. EPA-660/9-74-001
Pacific Northwest Environmental Research Laboratory,EPA Corvallis, OR – REF. NO. EPA-660/3-73-014
Pennsylvania State University University Park, PA – REF. NO. EPA-660/2-73-002
Pennsylvania State University University Park, PA – REF. NO. EPA-670/2-73-093
Pennsylvania State University University Park, PA – REF. NO. EPA-650/4-74-032
Pennsylvania State University University Park, PA – REF. NO. EPA-660/2-74-003
Pennsylvania State University University Park, PA – REF. NO. EPA-660/2-74-016
Pennsylvania State University University Park, PA – REF. NO. EPA-670/2-74-018
Pennsylvania State University University Park, PA – REF. NO. EPA-600/5-75-007
Pennsylvania State University, Department of Meteorology and Center for Air, Environmental Studies University Park, PA – REF.NO. EPA -650/4-74-045a
Pennsylvania State University, Department of Meteorology and Center for Air, Environmental Studies University Park, PA – REF.NO. EPA -650/4-74-045b
Pennsylvania, State of, Department of Environmental Resources Pittsburgh, PA – REF. NO. EPA-670/2-73-054
Pennsylvania, University of Philadelphia, PA – REF. NO. EPA-660/2-74-053
Pennsylvania, University of, Towne School of Civil and Mechanical Engineering Philadelphia, PA – REF. NO. EPA-670/2-73-072
Pesticides and Toxic Substances Effects Laboratory, EPA Research Triangle Park, NC – REF NO. EPA-650/1-73-001
Philadelphia Water Department Philadelphia, PA – REF. NO. EPA-670/2-74-049
Philco-Ford Corporation Newport Beach, CA – REF. NO. EPA-650/2-74-094
Philco-Ford Corporation Newport Beach, CA – REF. NO. EPA-650/2-74-120
Philco-Ford Corporation Newport Beach, CA – REF. NO. EPA-650/4-74-036

# PERFORMING ORGANIZATION INDEX

Philco-Ford Corporation, Aeronutronic Division Newport Beach, CA – REF. NO. EPA-650/2-73-030
Polytechnic Institute of Brooklyn Brooklyn, NY – REF. NO. EPA-670/2-75-030
Port Arthur, City of Port Arthur, TX – REF. NO. EPA-670/2-75-060
Potato Service, Inc. Presque Isle, ME – REF. NO. EPA-660/2-74-088
Potomac Engineering and Surveying Petersburg, WV – REF. NO. EPA-670/2-74-002
Princeton, Incorporated, Aeronautical Research Associates Princeton, NJ – REF. NO. EPA-650/4-74-035
Process Research, Inc. Cambridge, MA – REF. NO. EPA-670/2-73-076
Purdue University Lafayette, IN – REF. NO. EPA-660/2-74-043
Purdue University Lafayette, IN – REF. NO. EPA-660/3-74-004a
Purdue University Lafayette, IN – REF. NO. EPA-660/3-74-004b
PEDCo-Environmental Specialists, Inc. Cincinnati, OH – REF. NO. EPA-650/2-74-101
PEDCo-Environmental Specialists, Inc. Cincinnati, OH – REF. NO. EPA-650/2-74-1[illegible]
PEDCo-Environmental Specialists, Inc. Cincinnati, OH – REF. NO. EPA-650/2-74-122
Quality Assurance and Environmental Monitoring Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/4-74-018
Quality Assurance and Environmental Monitoring Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/4-74-047
Quality Assurance and Environmental Monitoring Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/4-74-048
Quality Assurance and Environmental Monitoring Laboratory, EPA Research Triangle Park, NC – REF. NO. EPA-650/4-75-007
Quality Assurance Research Laboratory, EPA Las Vegas, NV – REF. NO. EPA-680/4-73-001b
Quality Assurance Research Laboratory, EPA Las Vegas, NV – REF. NO. EPA-680/4-75-002a
Radian Corporation Austin, TX – REF. NO. EPA-650/2-74-024
Radian Corporation Austin, TX – REF. NO. EPA-650/2-74-033
Radian Corporation Austin, TX – REF. NO. EPA-650/2-75-006
Radian Corporation Austin, TX – REF. NO. EPA-650/2-75-038
Ralph M. Parsons Company Los Angeles, CA – REF. NO. EPA-670/2-73-092
Ralph Stone and Company, Inc. Los Angeles, CA – REF. NO. EPA-600/5-73-003
Ralph Stone and Company, Inc. Los Angeles, CA – REF. NO. EPA-670/2-74-095a
Ralph Stone and Company, Inc. Los Angeles, CA – REF. NO. EPA-670/2-74-095b
Raytheon Company Portsmouth, RI – REF. NO. EPA-600/5-74-004
Raytheon Company Pretsmouth, RI – REF. NO. EPA-670/2-74-087
Raytheon Company, Environmental Systems Center Portsmouth, RI – REF. NO. EPA-670/2-73-104
Recon Systems, Inc. Princeton, NJ – REF. NO. EPA-670/2-74-052
Regional Science Research Institute Philadelphia, PA – REF. NO. EPA-670/5-74-006
Rensselaer Polytechnic Institute Troy, NY – REF. NO. EPA-660/3-73-003
Rensselaer Polytechnic Institute Troy, NY – REF. NO. EPA-670/2-74-063
Research Corporation of New England Wethersfield, CT – REF. NO. EPA-650/2-74-008a
Research Corporation of New England Wethersfield, CT – REF. NO. EPA-650/4-74-042
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-600/5-74-009
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/2-74-019
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/2-74-097
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/2-74-111
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/2-74-118
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/2-74-121
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-005a
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-005b
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-005c
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-005d
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-005h
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-005L
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-005m
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-012
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/4-74-016
Research Triangle Institute Research Triangle Park, NC – REF. NO. EPA-650/2-75-021
Resource Planning Institute Cambridge, MA – REF. NO. EPA-670/2-74-024A
Resource Planning Institute Cambridge, MA – REF. NO. EPA-670/2-74-024B
Resource Planning Institute Cambridge, MA – REF. NO. EPA-670/5-74-002
Resource Planning Institute Cambridge, MA – REF. NO. EPA-670/5-74-004
Rhode Island, University of Kingston, RI – REF. NO. EPA-600/3-75-001
Richardson, City of Richardson, TX – REF. NO. EPA-670/2-73-060
Richmond, City of Richmond, VA – REF. NO. EPA-670/2-75-035
Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK – REF. NO. EPA-660/2-73-014
Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK – REF. NO. EPA-660/2-74-038
Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK – REF. NO. EPA-660/2-74-041
Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK – REF. NO. EPA-660/2-74-042
Robert S. Kerr Environmental Research Laboratory, EPA Ada, OK – REF. NO. EPA-660/2-74-046

# PERFORMING ORGANIZATION INDEX

Robert S. Kerr Environmental Research Laboratory, EPA  Ada, OK – REF. NO. EPA-660/2–74–062
Robert S. Kerr Environmental Research Laboratory, EPA  Ada, OK – REF. NO. EPA-660/2–74–065
Robert S. Kerr Environmental Research Laboratory, EPA  Ada, OK – REF. NO. EPA-660/2–74–066
Robert S. Kerr Environmental Research Laboratory, EPA  Ada, OK – REF. NO. EPA-660/2–74–067
Robert S. Kerr Environmental Research Laboratory, EPA  Ada, OK – REF. NO. EPA-660/2–74–087
Rocketdyne, Division of Rockwell International Corporation  Canoga Park, CA – REF. NO. EPA-650/2–74–023
Rocketdyne, Division of Rockwell International  Canoga Park, CA – REF. NO. EPA-650/2–74–047
Rockwell International  Thousand Oaks, CA – REF. NO. EPA-650/3–75–004
Rocky Mountain Center on Environment  Denver, CO – REF. NO. EPA-600/5–75–008
Rohnert Park, City of  Rohnert Park, CA – REF. NO. EPA-670/2–74–075
Rosenstiel School of Marine and Atmospheric Science, University of Miami  Miami, FL – REF. NO. EPA-660/3–74–014
Rutgers University  New Brunswick, NJ – REF. NO. EPA-670/2–73–027
Rutgers University  New Brunswick, NJ – REF. NO. EPA-670/2–74–094
Rutgers University, College of Agriculture and Environmental Science  New Brunswick, NJ – REF. NO. EPA-670/2–73–085
RAI Research Corporation  Haupage, Long Island, NY – REF. NO. EPA-660/2–74–035
S.K. Williams Company  Wauwatosa, WI – REF. NO. EPA-670/2–74–042
San Diego Utilities Department  San Diego, CA – REF. NO. EPA-670/2–73–039
San Francisco, City of  San Francisco, CA – REF. NO. EPA-670/2–75–054
San Jose Public Works Department, City of  San Jose, CA – REF. NO. EPA-670/2–73–096
Scientific Research Instruments Corporation  Baltimore, MD – REF. NO. EPA-650/2–73–042
Scott Environmental Technology  Plumsteadville, PA – REF. NO. EPA-650/4–75–008
Scott Research Laboratories, Inc.  Plumsteadville, PA – REF. NO. EPA-650/4–74–020
Seattle, Municipality of Metropolitan  Seattle, WA – REF. NO. EPA-670/2–74–022
Seattle, Municipality of Metropolitan  Seattle, WA – REF. NO. EPA-670/2–74–061
Shelbyville, City of  Shelbyville, IL – REF. NO. EPA-670/2–74–079
Shell Development Company  Houston, TX – REF. NO. EPA-670/2–73–084
Shell Development Company  Emeryville, CA – REF. NO. EPA-650/2–74–017
Skelly & Loy, Engineers  Harrisburg, PA – REF. NO. EPA-670/2–75–047
Smithsonian Institution  Cambridge, MA – REF. NO. EPA-600/4–75–001
Solid and Hazardous Waste Research Laboratory, EPA  Cincinnati, OH – REF. NO. EPA-670/5–73–021
Solid and Hazardous Waste Research Laboratory, EPA  Cincinnati, OH – REF. NO. EPA-670/2–74–007
Solid and Hazardous Waste Research Laboratory, EPA  Cincinnati, OH – REF. NO. EPA-670/2–75–005
Solid and Hazardous Waste Research Laboratory, EPA  Cincinnati, OH – REF. NO. EPA-670/2–75–025
Solid Waste Research Laboratory, EPA  Cincinnati, OH – REF. NO. EPA-670/2–73–001
South Dakota State University  Brookinger, SD – REF. NO. EPA-670/4–73–002
South Dakota State University  Brookings,, SD – REF. NO. EPA-660/2–74–005
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–73–007
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–73–009
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–73–013
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–73–034
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/3–73–007
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/3–73–012
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–74–001
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–74–002
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–74–017
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–74–045
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/2–74–078
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/3–74–021
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/3–75–007
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/3–75–012
Southeast Environmental Research Laboratory, EPA  Athens, GA – REF. NO. EPA-660/4–75–001
Southern Piedmont Conservation Research Center  Watkinsville, GA – REF. NO. EPA-660/2–74–017
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–73–035
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–074
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–079
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–092
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–102
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–114
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–124
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–129
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–129a
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–74–132
Southern Research Institute  Birmingham, AL – REF. NO. EPA-670/2–74–030
Southern Research Institute  Birmingham, AL – REF. NO. EPA-650/2–75–016

# PERFORMING ORGANIZATION INDEX

Southern Research Institute Birmingham, AL – REF. NO. EPA-650/2-75-022
Southern Research Institute Birmingham, AL – REF. NO. EPA-650/2-75-037
Southern Research Institute Birmingham, AL – REF. NO. EPA-670/2-75-043
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/1-74-003
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/1-74-008
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-013
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-021
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-022
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-024
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-025
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-026
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-027
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-028
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-029
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-033
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-74-039
Southwest Research Institute Houston, TX – REF. NO. EPA-660/2-74-026
Southwest Research Institute San Antonio, TX – REF. NO. EPA-670/2-74-092
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-75-003
Southwest Research Institute San Antonio, TX – REF. NO. EPA-650/4-75-009
Special Studies Staff, EPA Research Triangle Park, NC – REF. NO. EPA-600/6-75-001
Special Studies Staff, EPA Research Triangle Park, NC – REF. NO. EPA-600/6-75-002
Special Studies Staff, EPA Research Triangle Park, NC – REF. NO. EPA-600/6-75-003
St. Louis Sewer District, Metropolitan St. Louis, MO – REF. NO. EPA-670/2-73-098
St. Louis Sewer District, Metropolitan St. Louis, MO – REF. NO. EPA-670/2-74-062
St. Regis Paper Company Pensacola, FL – REF. NO. EPA-660/2-75-004
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-600/5-73-009
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/2-73-037
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/2-73-043
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/3-73-001
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/4-73-002
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/5-73-002
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-600/2-74-002
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/1-74-013
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/2-74-108
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/4-74-007
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/4-74-015
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/4-74-037
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-600/2-75-009
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-600/5-75-012
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-650/2-75-040
Stanford Research Institute Menlo Park, CA – REF. NO. EPA-660/3-75-016
Stanford University Pacific Grove, CA – REF. NO. EPA-660/3-75-013
Stanford University, Department of Civil Engineering Stanford, CA – REF. NO. EPA-670/2-73-010
Stanley Consultants, Inc. Muscatine, IA – REF. NO. EPA-660/2-74-014
Swift and Company Oakbrook, IL – REF. NO. EPA-660/2-73-015
Syracuse University Syracuse, NY – REF. NO. EPA-670/2-75-021
Syracuse University Research Corporation Syracuse, NY – REF. NO. EPA-670/2-73-087
Syracuse University, Department of Civil Engineering Syracuse, NY – REF. NO. EPA-670/2-73-065
System Development Corporation Santa Monica, CA – REF. NO. EPA-650/4-75-002
Systems Applications, Inc. San Rafael, CA – REF. NO. EPA-650/4-74-011
Systems Applications, Inc. San Rafael, CA – REF. NO. EPA-650/4-74-040
Systems Control, Inc. Palo Alto, CA – REF. NO. EPA-670/2-75-039
Systems Technology Associates Falls Church, VA – REF. NO. EPA-650/2-73-009
Systems, Science and Software La Jolla, CA – REF. NO. EPA-650/4-74-003
SAI, Inc. LaJolla, CA – REF. NO. EPA-650/2-75-041
SCS Engineers Long Beach, CA – REF. NO. EPA-660/2-74-075
SCS Engineers Long Beach, CA – REF. NO. EPA-670/2-75-028
Technical Information Staff, NERC Cincinnati, OH – REF. NO. EPA-670/9-75-001
Technical Information Staff, NERC Cincinnati, OH – REF. NO. EPA-670/9-75-002
Technical Information Staff, NERC Cincinnati, OH – REF. NO. EPA-670/9-75-003
Technology Service Corporation Santa Monica, CA – REF. NO. EPA-650/4-74-001
Teknekron, Inc. Washington, DC – REF. NO. EPA-600/5-74-015
Tennessee Valley Authority Chattanooga, TN – REF. NO. EPA-650/2-73-019a

# PERFORMING ORGANIZATION INDEX

**Tennessee Valley Authority** Chattanooga, TN – REF. NO. EPA-650/2-73-019b
**Tennessee Valley Authority** Chattanooga, TN – REF. NO. EPA-650/2-73-019c
**Tennessee Valley Authority** Chattanooga, TN – REF. NO. EPA-650/2-74-049a
**Tennessee Valley Authority** Muscle Shoals, TN – REF. NO. EPA-600/2-75-006
**Tennessee Valley Authority, Office of Agricultural and Development** Muscle Shoals, AL – REF. NO. EPA-650/2-73-051
**Tetra Technology, Inc.** Pasadena, CA – REF. NO. EPA-660/2-73-029
**Texas A&M University** College Station, TX – REF. NO. EPA-670/2-73-041
**Texas A&M University** College Station, TX – REF. NO. EPA-650/3-74-006
**Texas Municipal Water District, West Central** Abilene, TX – REF. NO. EPA-660/2-74-019
**Texas Technical University** Lubbock, TX – REF. NO. EPA-660/2-74-090
**Texas, University of** Austin, TX – REF. NO. EPA-660/2-73-025a
**Texas, University of** Austin, TX – REF. NO. EPA-660/2-73-025b
**Textile Research Institute** Princeton, NJ – REF. NO. EPA-650/2-75-002
**Thermo-Systems, Inc.** St. Paul, MN – REF. NO. EPA-650/2-73-022
**Thermo-Systems, Inc.** St. Paul, MN – REF. NO. EPA-650/4-74-017
**Thiokol Corporation** Brigham City, UT – REF. NO. EPA-670/2-74-091
**Thunder Scientific Corporation** Albuquerque, NM – REF. NO. EPA-650/2-73-008
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053A
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053B
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053C
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053D
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053E
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053F
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053G
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053H
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053I
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053J
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053K
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053L
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053M
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053N
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053O
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053P
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-670/2-73-053A-P
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-650/2-74-025
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-650/2-74-031a
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-650/2-74-031b
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-650/2-74-064
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-650/2-75-001a
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-650/2-75-001b
**TRW Systems Group** Redondo Beach, CA – REF. NO. EPA-650/2-75-020
**U.S. Bureau of Mines** Pittsburgh, PA – REF. NO. EPA-650/2-74-038
**U.S. Bureau of Mines** Bartlesville, OK – REF. NO. EPA-660/2-74-010
**U.S. Bureau of Mines** Bartlesville, OK – REF. NO. EPA-650/2-75-014
**U.S. Department of the Interior** Washington, DC – REF. NO. EPA-650/2-75-011
**U.S. Department of Commerce** Washington, DC – REF. NO. EPA-650/2-74-125
**U.S. Department of Health, Education, and Welfare, National Institute for Occupational Safety and Health** Rockville, MD – REF.NO. EPA -680/4-73-002
**U.S. Department of Interior** Columbia, MO – REF. NO. EPA-660/3-75-011
**U.S. Fish and Wildlife Service** Yankton, SD – REF. NO. EPA-660/3-75-010
**U.S. Forest Service** Fairbanks, AK – REF. NO. EPA-660/3-74-009
**U.S. Plywood-Champion Paper, Inc.** Hamilton, OH – REF. NO. EPA-660/2-73-019
**Ultrasystems, Inc.** Irvine, CA – REF. NO. EPA-650/2-74-045
**Union Carbide Corporation** Tonawanda, NY – REF. NO. EPA-670/2-73-042
**United Aircraft Research Laboratories** East Hartford, CT – REF. NO. EPA-650/2-73-045
**United Aircraft Research Laboratories** East Hartford, CT – REF. NO. EPA-650/2-74-020
**University City Science Center** Philadelphia, PA – REF. NO. EPA-670/2-75-041
**Urban Programs Division** El Segundo, CA – REF. NO. EPA-650/2-73-014
**Utah State University** Logan, UT – REF. NO. EPA-660/3-73-019
**Utah State University** Logan, UT – REF. NO. EPA-600/5-74-010
**Utah State University** Logan, UT – REF. NO. EPA-600/5-74-021
**Utah State University** Logan, UT – REF. NO. EPA-660/2-75-005
**Utah State University** Logan, UT – REF. NO. EPA-670/9-75-004
**Utah, University of** Salt Lake City, UT – REF. NO. EPA-660/3-73-004

# PERFORMING ORGANIZATION INDEX

Vanderbilt University Nashville, TN – REF. NO. EPA-660/2-73-012
Vanderbilt University Nashville, TN – REF. NO. EPA-660/2-74-085
Vanderbilt University Nashville, TN – REF. NO. EPA-660/3-75-002
Vermont, State of, Department of Water Resources Montpelier, VT – REF. NO. EPA-660/2-74-040
Versar, Inc. Springfield, VA – REF. NO. EPA-650/4-73-003
Virginia Institute of Marine Science Gloucester Point, VA – REF. NO. EPA-670/2-73-099
Virginia Polytechnic Institute Blacksburg, VA – REF. NO. EPA-600/5-73-014
Virginia, University of Charlottesville, VA – REF. NO. EPA-670/2-73-030
Walden Research Division of Abcor, Inc. Cambridge, MA – REF. NO. EPA-650/2-73-050
Walden Research Division of Abcor, Inc. Walden, MA – REF. NO. EPA-650/2-74-039
Walnut Creek Central Control Sanitary District Walnut Creek, CA – REF. NO. EPA-670/2-73-064
Walter C. McCrone Associates, Inc. Chicago, IL – REF. NO. EPA-650/2-73-024
Washington Environmental Research Center, EPA Washington, DC – REF. NO. EPA-600/5-74-012
Washington Environmental Research Center, EPA Washington, DC – REF. NO. EPA-600/5-74-017
Washington Environmental Research Center, Implementation Research Division, EPA Washington, DC – REF. NO. EPA-600/5-73-014
Washington Environmental Research Center, Implementation Research Division, EPA Washington, DC – REF. NO. EPA-600/5-74-003
Washington State University Pullman, WA – REF. NO. EPA-660/2-74-030
Washington, University of Seattle, WA – REF. NO. EPA-660/3-73-005
Washington, University of Seattle, WA – REF. NO. EPA-660/3-73-008
Washington, University of Seattle, WA – REF. NO. EPA-670/2-73-034
Washington, University of Seattle, WA – REF. NO. EPA-660/2-74-069
Water Supply Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-74-067
Water Supply Research Laboratory, EPA Cincinnati, OH – REF. NO. EPA-670/2-75-036
Water Supply Research Laboratory, NERC, EPA Cincinnati, OH – REF. NO. EPA-670/9-75-006
Waterloo, University of Waterloo, Ontario, Canada – REF. NO. EPA-660/3-73-011
Waterloo, University of Ontario, Canada – REF. NO. EPA-660/2-74-082
Waterloo, University of Ontario, Canada – REF. NO. EPA-660/2-74-083
Waterloo, University of, Department of Chemical Engineering Waterloo, Ontario, Canada – REF. NO. EPA-670/2-74-059
Wave Propagation Laboratory, NOAA/ERL Boulder, CO – REF. NO. EPA-650/2-74-113
West Virginia University Morgantown, VA – REF. NO. EPA-670/2-73-022
West Virginia University Morgantown, WV – REF. NO. EPA-670/2-74-070
West Virginia University Medical Center Morgantown, WV – REF. NO. EPA-650/1-74-011
West Virginia University, Department of Chemical Engineering Morgantown, WV – REF. NO. EPA-650/2-73-003
West Virginia University, Department of Civil Engineering Morgantown, WV – REF. NO. EPA-670/2-73-083
Western Potato Service, Inc. Grand Forks, ND – REF. NO. EPA-660/2-74-088
Westinghouse Electric Corporation, Research and Development Center Pittsburgh, PA – REF. NO. EPA-670/2-74-017
Westinghouse Research Laboratories Pittsburgh, PA – REF. NO. EPA-650/2-73-048a
Westinghouse Research Laboratories Pittsburgh, PA – REF. NO. EPA-650/2-73-048b
Westinghouse Research Laboratories Pittsburgh, PA – REF. NO. EPA-650/2-73-048c
Westinghouse Research Laboratories Pittsburgh, PA – REF. NO. EPA-650/2-73-048d
Westinghouse Research Laboratories Pittsburgh, PA – REF. NO. EPA-670/2-73-006
Westinghouse Research Laboratories Pittsburgh, PA – REF. NO. EPA-650/2-75-027a
Westinghouse Research Laboratories Pittsburgh, PA – REF. NO. EPA-650/2-75-027b
Wilkes College Wilkes Barre, PA – REF. NO. EPA-670/2-75-006
Winter Garden Citrus Products Cooperative Winter Garden, FL – REF. NO. EPA-660/2-75-001
Wisconsin Electric Power Company Milwaukee, WI – REF. NO. EPA-650/2-75-045
Wisconsin, University of Madison, WI – REF. NO. EPA-660/3-73-023
Wisconsin, University of Madison, WI – REF. NO. EPA-660/3-73-024
Wisconsin, University of Milwaukee, WI – REF. NO. EPA-670/2-73-079
Wisconsin, University of Madison, WI – REF. NO. EPA-660/2-74-006
Wisconsin, University of Madison, WI – REF. NO. EPA-660/3-74-020
Wisconsin, University of Madison, WI – REF. NO. EPA-660/3-75-006
Wisconsin, University of Madison, WI – REF. NO. EPA-660/3-75-022
Worcester Polytechnic Institute Worcester, MA – REF. NO. EPA-670/2-75-031
Worthington Biochemical Corporation Freehole, NJ – REF. NO. EPA-650/2-74-044
WAPORA, Inc. Washington, DC – REF. NO. EPA-660/2-73-026

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Agnew, R. W. | EPA-670/2-75-019 |
| Ahearn, D. G. | EPA-660/3-75-001 |
| Akinbami, S. O. | EPA-670/2-73-042 |
| Albrecht, O. W. | EPA-670/5-73-021 |
| Albrecht, R. M. | EPA-650/1-74-001 |
| Albred, E. R. | EPA-670/2-73-051 |
| Aleti, A. | EPA-600/5-75-004 |
| Alford, A. L. | EPA-660/2-73-013 |
| Alford, A. L. | EPA-660/2-74-002 |
| Alford, A. L. | EPA-660/2-74-078 |
| Alger, G. R. | EPA-660/2-74-018 |
| Allan, G. G. | EPA-670/2-73-034 |
| Allen, R. J. | EPA-650/4-73-002 |
| Alley, E. G. | EPA-660/3-75-024 |
| Allwood, J. K. | EPA-600/5-73-008b |
| Alspaugh, T. A. | EPA-660/2-74-039 |
| Alter, H. | EPA-670/2-75-034 |
| Anasoulis, R. F. | EPA-650/2-73-045 |
| Anastas, M. Y. | EPA-670/2-74-083 |
| Andersen, J. C. | EPA-600/5-74-010 |
| Andersen, J. R. | EPA-660/2-74-005 |
| Andersland, O. B. | EPA-670/2-74-076a |
| Andersland, O. B. | EPA-670/2-74-076b |
| Anderson, G. E. | EPA-650/4-73-001 |
| Anderson, J. L. | EPA-660/2-73-012 |
| Andrews, J. F. | EPA-670/2-73-061 |
| Antoni, C. M. | EPA-670/2-73-065 |
| Appleman, R. | EPA-660/3-73-015 |
| Aresco, S. J. | EPA-650/2-74-030 |
| Arkle Jr, T. | EPA-670/2-74-070 |
| Armento, W. J. | EPA-650/2-74-002a |
| Armstrong, D. E. | EPA-660/3-75-006 |
| Armstrong, T. A. | EPA-670/2-74-076a |
| Atkinson, S. E. | EPA-600/5-74-003 |
| Ayars, J. | EPA-660/2-74-084 |
| Azarraga, L. V. | EPA-660/2-73-034 |
| Badgley, M. D. | EPA-600/5-75-012 |
| Bagley, M. | EPA-600/5-73-009 |
| Baier, R. E. | EPA-670/2-75-042 |
| Baierl, K. W. | EPA-660/2-73-030 |
| Bailey, G. W. | EPA-660/2-74-017 |
| Baillod, C. R. | EPA-660/2-74-018 |
| Baity Jr., F. W. | EPA-650/2-74-046b |
| Baker, D. A. | EPA-660/2-74-027 |
| Baker, D. R. | EPA-660/2-75-009 |
| Ball, G. | EPA-670/2-73-049 |
| Ballay, J. M. | EPA-660/2-73-002 |
| Balouskus, R. A. | EPA-670/2-74-023 |
| Bannerman, R. T. | EPA-660/3-75-006 |
| Baratz, B. | EPA-660/2-73-026 |
| Barbour, J. F. | EPA-670/2-74-027 |
| Barker, J. C. | EPA-660/2-74-064 |
| Barnett, A. P. | EPA-660/2-74-017 |
| Barnett, Jr., J. T. | EPA-660/3-75-007 |
| Barrager, S. M. | EPA-600/5-73-005 |
| Barrett, J. J. | EPA-670/2-74-030 |
| Barry, J. P. | EPA-670/2-75-028 |
| Barth, J. | EPA-680/4-73-002 |
| Bartholomew, E. | EPA-600/5-75-011 |
| Barton, J. R. | EPA-660/2-75-007 |
| Bartsch, A. F. | EPA-660/9-74-002 |
| Bascom, S. B. | EPA-600/5-75-002 |
| Bass, T. D. | EPA-670/2-74-048 |
| Bateman, T. W. | EPA-660/2-74-063 |
| Battista, C. A. | EPA-670/2-73-066 |
| Baugham, G. L. | EPA-660/3-73-012 |
| Baughman, G. L. | EPA-660/3-75-007 |
| Baumgardner Jr., R. E. | EPA-650/2-74-046b |
| Becker, B. C. | EPA-660/2-73-035 |
| Becker, B. C. | EPA-660/2-74-073 |
| Becker, E. R. | EPA-670/2-73-096 |
| Beckers, C. V. | EPA-600/5-74-004 |
| Beckman, J. E. | EPA-670/2-75-009 |
| Bellar, T. A. | EPA-670/4-74-008 |
| Bellar, T. A. | EPA-670/4-74-009 |
| Bender, D. F. | EPA-670/2-73-001 |
| Benedict, B. A. | EPA-660/2-73-012 |
| Benedict, H. M. | EPA-650/5-73-002 |
| Bennet, S. M. | EPA-670/2-75-008 |
| Bennett, R. S. | EPA-660/2-74-049 |
| Bennett, R. S. | EPA-660/2-74-052 |
| Bennett, R. S. | EPA-660/2-74-084 |
| Benson, A. L. | EPA-650/2-73-032 |
| Berg, G. | EPA-670/2-73-003 |
| Berg, G. | EPA-670/9-74-005 |
| Bergstedt, L. | EPA-660/3-75-014 |
| Berkau, E. E. | EPA-600/2-75-010 |
| Berkau, E. E. | EPA-650/2-73-031 |
| Berkau, E. E. | EPA-650/2-73-029 |
| Berkau, E. E. | EPA-650/2-74-003 |
| Berkowitz, J. B. | EPA-670/2-75-024 |
| Bernstein, S. | EPA-660/2-74-025 |
| Berry, B. J. | EPA-600/5-75-003 |
| Berry, E. C. | EPA-660/3-75-019 |
| Berry, J. W. | EPA-660/2-74-011 |
| Bevege, E. | EPA-670/2-75-009 |
| Beychok, M. R. | EPA-660/2-75-011 |
| Beyers, R. J. | EPA-660/3-73-025 |
| Bhagwat, A. | EPA-660/3-73-005 |
| Bhatt, G. | EPA-670/2-74-009 |
| Bhutani, J. | EPA-600/2-75-007b |
| Bhutani, J. | EPA-600/2-75-007a |
| Bhutani, J. | EPA-600/2-75-011 |
| Bickelhaupt, E. E. | EPA-600/5-73-012d |
| Bienstock, D. | EPA-650/2-74-038 |
| Bildstein, K. | EPA-600/5-73-012e |
| Billedeau, S. M. | EPA-650/2-74-068 |
| Bingham, T. H. | EPA-600/5-74-009 |
| Bird Jr., A. V. | EPA-650/2-73-035 |
| Birks, L. S. | EPA-650/2-73-006 |
| Bishop, A. B. | EPA-600/5-74-021 |
| Bishop, A. B. | EPA-600/5-74-010 |
| Bishop, D. F. | EPA-670/2-73-040 |
| Bishop, D. F. | EPA-670/2-73-037 |
| Bishop, D. F. | EPA-670/2-73-033 |
| Bishop, D. F. | EPA-670/2-73-073 |
| Bishop, D. F. | EPA-670/2-73-075 |
| Bishop, D. F. | EPA-670/2-73-070 |
| Bishop, D. F. | EPA-670/2-75-008 |
| Bishop, D. F. | EPA-670/2-75-052 |
| Bishop, D. F. | EPA-670/2-75-051 |
| Black, A. P. | EPA-660/2-74-055 |
| Black, A. P. | EPA-660/2-75-006 |
| Black, S. C. | EPA-680/1-75-001 |
| Blakeslee, C. E. | EPA-650/2-73-005 |

Preceding page blank

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Bock, D. H. | EPA-670/2-75-042 |
| Bode, J. D. | EPA-650/2-73-010 |
| Boen, D. F. | EPA-670/2-74-077 |
| Boen, D. F. | EPA-670/2-75-027 |
| Boettner, E. A. | EPA-670/2-73-049 |
| Bolton, R. E. | EPA-670/2-74-068 |
| Bolton, R. E. | EPA-670/2-74-038 |
| Bond, R. G. | EPA-670/2-73-048 |
| Bond, R. G. | EPA-670/5-73-020 |
| Bonz, P. E. | EPA-670/2-73-069 |
| Boone, J. E. | EPA-650/2-73-012 |
| Booth, R. L. | EPA-670/4-74-002 |
| Borgos, J. A. | EPA-650/2-73-022 |
| Bories, D. B. | EPA-660/2-73-026 |
| Borror, A. C. | EPA-660/3-74-031 |
| Bott, T. | EPA-660/2-75-008 |
| Bourquin, A. W. | EPA-660/3-75-001 |
| Bowman, M. M. | EPA-660/3-75-004 |
| Boyd, W. W. | EPA-670/2-74-084 |
| Boyle, W. C. | EPA-660/3-75-022 |
| Bradford, R. R. | EPA-660/2-74-033 |
| Bradshaw, J. S. | EPA-660/2-75-007 |
| Bradway, R. | EPA-650/2-74-036 |
| Bragg, G. M. | EPA-660/2-74-083 |
| Brand, B. G. | EPA-670/2-74-014 |
| Brater, E. F. | EPA-670/2-75-046 |
| Braughan, D. A. | EPA-670/2-74-084 |
| Braughan, D. A. | EPA-670/2-74-083 |
| Brauhn, J. L. | EPA-660/3-75-011 |
| Bretthauer, E. W. | EPA-680/1-75-001 |
| Brezonik, P. L. | EPA-660/3-73-002 |
| Bricewell, L. | EPA-660/3-74-016 |
| Brier, G. W. | EPA-650/4-75-010 |
| Broadfoot, W. J. | EPA-600/2-75-006 |
| Brommenschenkel Jr., F. | EPA-660/2-74-034 |
| Brooks, N. G. | EPA-660/3-73-010 |
| Brown, J. C. | EPA-670/2-73-047a |
| Brown, J. W. | EPA-650/2-73-029 |
| Brown, L. R. | EPA-660/3-75-024 |
| Brownstein, A. B. | EPA-600/5-75-007 |
| Brows, D. | EPA-670/2-74-095b |
| Bruckner, B. H. | EPA-680/4-73-002 |
| Brusewitz, G. H. | EPA-660/2-75-009 |
| Budee, P. A. | EPA-600/2-75-009 |
| Bujak, P. | EPA-600/5-73-012e |
| Burch, D. E. | EPA-650/2-73-030 |
| Burchfiled, H. P. | EPA-650/2-74-068 |
| Burchinal, J. C. | EPA-670/2-73-083 |
| Burklin, C. E. | EPA-650/2-75-038 |
| Burns, R. | EPA-670/2-74-003 |
| Burton, J. | EPA-660/2-74-007 |
| Buzzard, M. | EPA-660/3-75-021 |
| Byerley, J. J. | EPA-670/2-74-059 |
| Caldwell, E. | EPA-650/1-74-004 |
| Caldwell, E. | EPA-650/4-74-008 |
| Callaway, R. J. | EPA-660/3-73-014 |
| Callihan, C. D. | EPA-670/2-73-095 |
| Calvert, S. | EPA-650/2-73-036 |
| Campbell, T. L. | EPA-670/2-73-103 |
| Canter, L. | EPA-660/2-74-037 |
| Capper, J. | EPA-670/2-74-044 |
| Carawan, R. E. | EPA-660/2-74-031 |
| Cardin, F. A. | EPA-670/5-74-004 |
| Carlson, D. A. | EPA-670/2-74-061 |
| Carlson, O. N. | EPA-670/2-73-091 |
| Carpenter, B. H. | EPA-650/2-74-097 |
| Carroll, J. | EPA-600/5-74-032 |
| Carroll, T. E. | EPA-670/2-75-049 |
| Carter, S. | EPA-600/5-73-016 |
| Case, O. P. | EPA-670/2-74-008 |
| Case, P. O. | EPA-670/2-75-029 |
| Cass, R. | EPA-650/2-74-036 |
| Cassel, A. H. | EPA-670/2-73-040 |
| Caster, R. | EPA-660/3-74-016 |
| Cavanaugh, G. | EPA-650/2-75-038 |
| Cerrillo, L. A. | EPA-660/3-75-018 |
| Chagy, Y. C. | EPA-660/2-73-029 |
| Chamberlain, S. G. | EPA-600/5-74-004 |
| Chambers, M. D. | EPA-600/5-74-021 |
| Chan, F. K. | EPA-650/2-74-072 |
| Chang, N. L. | EPA-660/2-73-030 |
| Chansky, S. | EPA-600/5-74-032 |
| Charlie, W. A. | EPA-670/2-74-076b |
| Chase, G. | EPA-670/2-74-044 |
| Chasse, J. | EPA-660/2-73-001 |
| Chatterjee, S. | EPA-600/5-74-016 |
| Chaung, S. C. | EPA-660/3-74-004b |
| Chernoff, N. | EPA-650/1-73-001 |
| Cherry Jr., R. H. | EPA-670/2-75-018 |
| Chesness, J. L. | EPA-660/2-74-064 |
| Chin, F. Y. | EPA-600/5-75-004 |
| Choi, P. | EPA-600/2-74-001 |
| Christianson, A. G. | EPA-660/2-73-016 |
| Christianson, C. B. | EPA-660/2-74-070 |
| Chung, J. | EPA-650/2-73-027 |
| Citron, R. | EPA-600/4-75-001 |
| Clar, M. L. | EPA-660/2-74-071 |
| Clark, D. A. | EPA-660/2-74-038 |
| Clark, D. A. | EPA-660/2-74-065 |
| Clark, M. J. | EPA-670/2-75-019 |
| Clark, R. M. | EPA-670/1-74-001 |
| Clark, R. M. | EPA-670/2-74-067 |
| Clark, R. M. | EPA-670/5-73-012 |
| Clements III, E. V. | EPA-670/2-75-038 |
| Clements, E. V. | EPA-660/2-74-075 |
| Clesceri, N. L. | EPA-660/3-73-003 |
| Clesceri, N. L. | EPA-670/2-74-063 |
| Cliese, J. D. | EPA-660/2-74-060 |
| Cobian, K. E. | EPA-660/2-73-033 |
| Cochran, R. A. | EPA-670/2-73-084 |
| Cohen, I. M. | EPA-660/2-74-053 |
| Cohen, S. | EPA-670/2-74-071 |
| Cohn, M. M. | EPA-670/2-74-026 |
| Cohn, M. M. | EPA-670/2-74-039 |
| Cohn, S. | EPA-600/5-73-015 |
| Cole, C. A. | EPA-670/2-73-033 |
| Cole, D. E. | EPA-670/2-75-061 |
| Collins, A. G. | EPA-660/2-74-010 |
| Collins, D. C. | EPA-650/4-74-001 |
| Collins, J. | EPA-660/2-74-069 |
| Colston, N. V. | EPA-670/2-74-096 |
| Conden Jr., R. L. | EPA-670/2-73-024 |
| Conner, W. | EPA-650/2-74-013 |
| Converse, A. O. | EPA-670/2-73-011 |
| Cook, D. W. | EPA-660/3-75-024 |
| Cooley, A. M. | EPA-660/2-74-093 |
| Cooley, P. C. | EPA-600/5-74-009 |
| Cooper, D. | EPA-600/5-74-016 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Cooper, K. G. | EPA-600/5-75-002 |
| Cooper, P. C. | EPA-600/5-73-012c |
| Cordle, S. R. | EPA-600/2-75-010 |
| Counts, C. A. | EPA-670/2-75-012 |
| Coursey, J. F. | EPA-650/2-74-004 |
| Courtney, K. D. | EPA-650/1-73-001 |
| Coutts, H. J. | EPA-660/2-74-070 |
| Cox, M. F. | EPA-660/3-74-021 |
| Craig, S. E. | EPA-650/2-74-046a |
| Crawford, N. H. | EPA-660/2-74-013 |
| Crites, R. W. | EPA-660/2-73-006b |
| Crites, R. W. | EPA-660/2-73-006a |
| Crosswhite, W. M. | EPA-660/2-74-031 |
| Crowder, D. G. | EPA-670/2-73-067 |
| Cruver, J. E. | EPA-670/2-75-009 |
| Csanady, G. T. | EPA-660/2-74-083 |
| Csanady, G. T. | EPA-660/2-74-082 |
| Csanady, G. T. | EPA-660/3-73-011 |
| Cummings, F. H. | EPA-600/5-74-018 |
| Currier, R. A. | EPA-670/2-73-005 |
| Curtin, C. | EPA-650/2-73-050 |
| Curtis, V. | EPA-600/5-75-009 |
| Cushing, K. M. | EPA-650/2-73-035 |
| Cutkomp, L. K. | EPA-660/2-73-027 |
| Cyr, J. W. | EPA-660/2-74-088 |
| Dalrymple, R. J. | EPA-670/2-75-011 |
| Daly, W. H. | EPA-670/2-75-032 |
| Damron, B. L. | EPA-660/2-75-001 |
| Dangel, R. A. | EPA-670/2-75-036 |
| Daniels, S. L. | EPA-670/2-73-103 |
| Darling, J. E. | EPA-670/2-75-022 |
| Daul, F. R. | EPA-660/2-74-012 |
| Davanzo, A. C. | EPA-670/2-75-020 |
| Davenport, C. V. | EPA-660/2-73-005 |
| Davidson, J. M. | EPA-660/2-75-009 |
| Davis, A. E. | EPA-600/2-74-003 |
| Davis, H. L. | EPA-670/2-75-063 |
| Davis, T. A. | EPA-670/2-75-043 |
| Dawson, G. W. | EPA-670/2-73-078 |
| Day, D. E. | EPA-670/2-73-038 |
| Day, D. E. | EPA-670/2-75-053 |
| De Primo, M. J. | EPA-670/2-73-098 |
| Dearby, R. L. | EPA-670/4-74-003a |
| Decker, C. E. | EPA-650/2-74-019 |
| Demerjian, K. L. | EPA-650/3-73-002 |
| Demeter, J. | EPA-650/2-74-038 |
| Dennis, R. | EPA-650/2-74-036 |
| Derrington, R. E. | EPA-670/2-73-060 |
| DeBose, A. T. | EPA-660/2-74-055 |
| DeDecker, F. J. | EPA-670/2-75-010 |
| DeLuca, F. A. | EPA-660/2-74-056 |
| DeLucia, R. J. | EPA-600/5-74-030 |
| DeLucia, R. J. | EPA-600/5-75-001 |
| DeWitt Jr., F. A. | EPA-670/2-75-059 |
| DeWitt Jr., F. A. | EPA-670/2-75-044 |
| DeWitt, Jr., F. A. | EPA-670/2-75-003 |
| Dickerson, J. C. | EPA-650/2-75-038 |
| Dickson, E. M. | EPA-600/2-74-002 |
| Diesch, S. L. | EPA-660/2-75-012 |
| Diesch, S. L. | EPA-670/2-73-051 |
| Dimauro, P | EPA-650/2-73-009 |
| Ditoro, D. M. | EPA-660/3-73-009 |
| Ditsworth, G. R. | EPA-660/3-73-014 |
| Dixon, P. S. | EPA-660/3-73-015 |
| DiToro, D. M. | EPA-660/3-75-005 |
| Dodds, H. | EPA-650/2-73-009 |
| Donigian, A. S. | EPA-660/2-74-013 |
| Dorian, G. | EPA-660/2-74-074 |
| Dornbusch, D. M. | EPA-600/5-73-005 |
| Dornbush, J. N. | EPA-660/2-74-005 |
| Dorough, U. W. | EPA-650/1-74-002 |
| Dostal, K. A. | EPA-660/2-74-058 |
| Douglas, G. | EPA-660/2-73-037 |
| Downing, P. B. | EPA-600/5-73-014 |
| Doyle, A. | EPA-650/2-73-023 |
| Doyle, F. J. | EPA-670/2-74-009 |
| Doyle, J. R. | EPA-670/2-75-022 |
| Drake, J. A. | EPA-650/2-73-014 |
| Dressler, F. R. | EPA-670/2-75-041 |
| Driscoll, J. | EPA-650/2-73-050 |
| Drost-Hansen, W. | EPA-660/3-74-003 |
| Duchene, A. G. | EPA-670/5-74-001 |
| Duffee, R. A. | EPA-650/2-74-008a |
| Dugal, H. S. | EPA-660/2-74-029 |
| Duncan, L. J. | EPA-600/2-74-004 |
| Dunlap, C. E. | EPA-670/2-73-095 |
| Dunlap, W. J. | EPA-660/2-73-014 |
| Durfre, R. L. | EPA-650/4-73-003 |
| Duvall, D. S. | EPA-670/2-75-033d |
| Duvall, D. S. | EPA-670/2-75-033c |
| Duvall, D. S | EPA-670/2-75-033b |
| Duvall, D. S. | EPA-670/2-75-033a |
| Edinger, J. | EPA-660/2-74-053 |
| Ehreth, D. J. | EPA-670/9-75-004 |
| Eilers, R. G. | EPA-670/2-73-046 |
| Eilers, R. G. | EPA-670/2-73-044 |
| Eilers, R. G. | EPA-670/2-73-045 |
| Eilers, R. G. | EPA-670/2-74-069 |
| Eisenmann, J. L. | EPA-670/2-73-076 |
| Eisler, R. | EPA-660/3-75-023 |
| Eldridge, J. E. | EPA-670/4-75-006 |
| Elfers, K. | EPA-600/5-73-015 |
| Eliassen, R. | EPA-670/2-73-010 |
| Ellis, W. J. | EPA-660/2-74-057 |
| Emerson, D. B. | EPA-660/2-73-035 |
| Emerson, M. J. | EPA-600/5-73-008a |
| Englebrecht, R. S. | EPA-670/2-73-082 |
| Enns, K. | EPA-670/2-74-059 |
| Epstein, M. | EPA-650/2-73-013 |
| Epstein, M. | EPA-650/2-74-010 |
| Erickson, A. E. | EPA-660/2-74-057 |
| Erley, D. | EPA-600/5-75-005 |
| Ernst, E. | EPA-670/5-75-001 |
| Ernst, U. F. | EPA-600/5-74-018 |
| Evans, W. F. | EPA-650/4-73-002 |
| Everson, T. C. | EPA-660/2-74-025 |
| Falkenborg, D. H. | EPA-670/9-75-004 |
| Falter, C. M. | EPA-660/3-73-017 |
| Farmer, W. J. | EPA-660/2-74-054 |
| Farnham, W. B. | EPA-660/2-74-040 |
| Farquhar, J. | EPA-660/2-74-075 |
| Farrah, S. R. | EPA-670/2-74-018 |
| Farrell, J. B. | EPA-670/2-75-013 |
| Farrell, P. J. | EPA-660/2-73-010 |
| Felder, M. | EPA-600/5-73-012a |
| Feldman, M. H. | EPA-660/3-73-013 |
| Fensterstock, J. C. | EPA-600/5-74-015 |
| Fenters, J. D. | EPA-650/1-73-002 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Ferens, M. C. | EPA-660/3-73-022 |
| Ferguson, R. A. | EPA-650/2-73-037 |
| Ferguson, T. L. | EPA-660/2-74-094 |
| Ferguson, T. L. | EPA-670/2-75-057 |
| Ferrar, T. A. | EPA-600/5-75-007 |
| Feuerstein, D. L. | EPA-670/2-75-037 |
| Field, R. | EPA-670/2-73-059 |
| Field, R. | EPA-670/2-74-090 |
| Finger, R. E. | EPA-670/2-74-061 |
| First, M. W. | EPA-670/2-73-017 |
| Fischer, J. R. | EPA-660/2-74-036 |
| Fisette, G. R. | EPA-670/2-74-066 |
| Fisher, J. H. | EPA-660/2-74-028 |
| Fisk, A. T. | EPA-670/2-74-020 |
| Fitzgerald, G. P. | EPA-660/3-73-023 |
| Flegal, C. A. | EPA-650/2-74-025 |
| Fleischer, L. R. | EPA-670/2-73-006 |
| Flinn, J. E. | EPA-600/5-74-005 |
| Fober, H. A. | EPA-660/2-73-020 |
| Fogel, M. E. | EPA-600/5-74-009 |
| Fojo, C. V. | EPA-600/2-75-009 |
| Fookson, A. | EPA-670/2-73-052 |
| Foran, J. F. | EPA-670/2-74-024B |
| Foran, J. F. | EPA-670/2-74-024A |
| Fordyce, I. V. | EPA-660/2-74-093 |
| Forso, K. | EPA-660/2-74-069 |
| Foster, C. B. | EPA-600/2-75-011 |
| Foster, D. H. | EPA-670/2-73-082 |
| Francey, G. J. | EPA-670/2-75-002 |
| Franco, N. B. | EPA-670/2-74-023 |
| Frank, C. | EPA-660/9-74-002 |
| Fraser, J. P. | EPA-670/2-73-084 |
| Frast, M. | EPA-600/5-73-016 |
| Freed, V. H. | EPA-670/2-74-027 |
| Freeman III, A. M. | EPA-600/5-74-029 |
| Fremount, H. A. | EPA-660/2-73-019 |
| Frey, P. J. | EPA-660/3-75-019 |
| Frey, P. J. | EPA-660/3-75-020 |
| Frohnsdorff, G. | EPA-670/2-73-052 |
| Frost, R. R. | EPA-650/2-73-044 |
| Fryer, J. L. | EPA-660/3-73-020 |
| Fuhriman, D. K. | EPA-660/2-75-007 |
| Fullerton, H. H. | EPA-600/5-74-021 |
| Funkhouser, J. T. | EPA-650/2-73-023 |
| Gaby, W. L. | EPA-670/2-75-023 |
| Gagliano, S. M. | EPA-600/5-75-006 |
| Gahler, A. R. | EPA-660/3-74-015 |
| Gales, M. E. | EPA-670/4-74-002 |
| Garner, W. | EPA-670/2-74-048 |
| Gass, P. J. | EPA-600/5-74-008 |
| Gaufin, A. R. | EPA-660/3-73-004 |
| Gaufin, A. R. | EPA-660/3-74-023 |
| Gehrs, C. W. | EPA-660/3-74-006 |
| Geinapolos, A. | EPA-670/2-74-025 |
| Geldreich, E. E. | EPA-670/9-75-006 |
| Genco, J. M. | EPA-670/2-75-049 |
| Gerba, J. | EPA-600/5-75-011 |
| Gerber, N. N | EPA-670/2-74-094 |
| Gerhard, J. | EPA-650/3-74-009 |
| Giever, P. | EPA-650/2-73-023 |
| Gilfrich, J. V. | EPA-650/2-73-006 |
| Gillean, J. I. | EPA-670/5-73-012 |
| Gillett, J. W. | EPA-660/3-74-024 |
| Gillmeister, R. J. | EPA-650/2-74-046b |
| Glasser, W. G. | EPA-660/2-74-069 |
| Glueckert, A. J. | EPA-670/2-75-007 |
| Goddard, H. C. | EPA-670/1-74-001 |
| Goldman, C. R. | EPA-660/3-74-034 |
| Goldschmidt, V. W. | EPA-660/3-74-004b |
| Goldschmidt, V. W. | EPA-660/3-74-004a |
| Goldshmid, J. | EPA-650/2-73-036 |
| Goldsmith, R. L. | EPA-660/2-73-019 |
| Goodrich, P. R. | EPA-660/2-75-012 |
| Gordon, R. C. | EPA-660/2-73-005 |
| Gorman, P. G. | EPA-600/5-74-007 |
| Gove, C. S. | EPA-670/2-73-065 |
| Gram, A. L. | EPA-660/2-73-022 |
| Grant, F. | EPA-660/2-74-034 |
| Gratzl, J. S. | EPA-650/2-74-005 |
| Gratzl, J. S. | EPA-660/2-74-069 |
| Gray, A. F. | EPA-660/2-74-036 |
| Gray, R. A. | EPA-650/2-74-046b |
| Green, A. C. | EPA-670/2-74-056 |
| Green, E. E. | EPA-650/2-74-068 |
| Green, O. | EPA-670/2-73-103 |
| Greening, E. D. | EPA-670/2-73-082 |
| Gresswell, R. E. | EPA-660/3-73-019 |
| Grethlein, H. E. | EPA-670/2-73-011 |
| Griffin, L. I. | EPA-650/2-74-035 |
| Grim, E. C. | EPA-670/2-74-093 |
| Grimsley, D. H. | EPA-600/5-73-012d |
| Groner, R. R. | EPA-670/2-74-027 |
| Groseclose, J. L. | EPA-670/2-73-098 |
| Grossman, D. S. | EPA-670/2-75-026b |
| Grossman, D. S. | EPA-670/2-75-026a |
| Grube Jr, W. E. | EPA-670/2-74-070 |
| Grupenhoff, B. L. | EPA-670/2-74-067 |
| Gumtz, G. D. | EPA-670/2-73-068 |
| Gumtz, G. D. | EPA-670/2-74-013 |
| Gumtz, G. D. | EPA-670/2-74-097 |
| Gumtz, G. D. | EPA-670/2-75-056 |
| Guttman, J. | EPA-600/5-73-012b |
| Guzdar, A. R. | EPA-670/2-74-019 |
| Guzdar, A. R. | EPA-670/2-74-021 |
| Guzdar, A. R. | EPA-670/2-74-020 |
| Haderlie, E. E. | EPA-660/3-75-013 |
| Hagarman, J. A. | EPA-670/2-75-041 |
| Haile, C. L. | EPA-660/3-75-022 |
| Hais, A. B. | EPA-670/2-73-073 |
| Hais, A. B. | EPA-670/2-75-008 |
| Hale, A. M. | EPA-660/2-74-083 |
| Hall, C. F. | EPA-670/2-73-041 |
| Hall, E. | EPA-600/2-74-001 |
| Hall, E. D. | EPA-670/2-73-044 |
| Hall, E. D. | EPA-670/2-73-045 |
| Hall, E. D. | EPA-670/2-73-046 |
| Hall, R. E. | EPA-650/2-73-031 |
| Hall, R. E. | EPA-650/2-74-003 |
| Halligan, J. E. | EPA-660/2-74-090 |
| Hallowell, J. B. | EPA-670/2-75-055 |
| Hamersma, J. W. | EPA-650/2-74-025 |
| Hamil, H. F. | EPA-650/4-74-021 |
| Hamil, H. F. | EPA-650/4-74-022 |
| Hammer Jr., P. G. | EPA-600/5-73-007 |
| Hammond, V. L. | EPA-670/2-75-014 |
| Hanks, R. J. | EPA-660/2-75-005 |
| Hansen, C. A. | EPA-670/2-75-019 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Hansen, C. M. | EPA-660/2-74-057 |
| Hansen, R. P. | EPA-600/5-75-008 |
| Happel, J. | EPA-650/2-73-020 |
| Hardin, B. D. | EPA-660/3-74-006 |
| Hare, C. P. | EPA-670/2-74-092 |
| Harman, D. J. | EPA-670/9-73-056 |
| Harms, L. L. | EPA-660/2-74-005 |
| Harrington, J. | EPA-600/5-74-020 |
| Harris, R. F. | EPA-660/3-75-006 |
| Harstkatte Jr., G. A. | EPA-670/2-73-064 |
| Hart, F. D. | EPA-600/2-75-010 |
| Harvey, R. D. | EPA-650/2-73-044 |
| Hatch, L. T. | EPA-660/2-73-036 |
| Hawkins, B. K. | EPA-660/2-74-031 |
| Haynie, F. H. | EPA-650/3-74-009 |
| Hazen, T. E. | EPA-660/2-74-009 |
| Heaney, J. P. | EPA-600/5-74-013 |
| Heaney, J. P. | EPA-670/2-75-022 |
| Heaney, J. P. | EPA-670/2-75-017 |
| Hebert, R. | EPA-650/2-73-050 |
| Heble, L. R. | EPA-660/2-73-010 |
| Hecht, N. L. | EPA-670/2-75-033c |
| Hecht, N. L. | EPA-670/2-75-033a |
| Hecht, N. L. | EPA-670/2-75-033d |
| Hecht, N. L. | EPA-670/2-75-033b |
| Heenan, A. T. | EPA-670/2-74-024A |
| Heenan, A. T. | EPA-670/2-74-024B |
| Heeney, J. M. | EPA-670/2-74-043 |
| Heidman, J. A. | EPA-670/2-75-051 |
| Heidman, J. A. | EPA-670/2-75-052 |
| Heimburg, R. W. | EPA-670/2-73-087 |
| Hein, C. J. | EPA-600/5-74-024 |
| Helmers, A. E. | EPA-660/3-74-009 |
| Hemphill, D. P. | EPA-670/2-73-084 |
| Henson, L. J. | EPA-600/2-75-006 |
| Herkert, E. C. | EPA-670/2-73-071 |
| Herzog, K. L. | EPA-660/2-74-090 |
| Heukelekian, H. | EPA-670/2-73-027 |
| Hicks, H. C. | EPA-660/2-73-023 |
| Hill IV, J. | EPA-660/3-74-024 |
| Hill, R. D. | EPA-670/2-74-093 |
| Himmelstein, H. L. | EPA-600/5-73-012b |
| Hnatow, M. | EPA-650/2-73-020 |
| Hodd, S. L. | EPA-670/2-75-011 |
| Hoffman, J. A. | EPA-670/2-73-039 |
| Hoffman, L. | EPA-650/2-74-030 |
| Hogan, C. M. | EPA-660/2-73-003 |
| Hoke, R. C. | EPA-650/2-74-001 |
| Holberger, R. | EPA-600/2-75-007a |
| Holdren, G. C. | EPA-660/3-75-006 |
| Holm, H. W. | EPA-660/3-73-007 |
| Holm, H. W. | EPA-660/3-74-021 |
| Holm, R. A. | EPA-660/2-73-030 |
| Holuec, I. | EPA-670/2-73-081 |
| Honack, P. | EPA-670/2-73-071 |
| Hong, S. | EPA-670/2-74-035b |
| Hooks, D. B. | EPA-670/2-75-043 |
| Hoover, A. W. | EPA-650/1-74-001 |
| Hoover, T. B. | EPA-660/4-75-001 |
| Hopkins, H. T. | EPA-660/2-74-071 |
| Horne, R. | EPA-670/2-75-024 |
| Hornsback, K. E. | EPA-600/5-74-011 |
| Horowitz, A. | EPA-650/4-74-001 |
| Horsnback, K. E. | EPA-600/5-73-012b |
| Hortenstine, C. C. | EPA-670/2-73-063 |
| Horton, W. | EPA-600/5-73-012e |
| Hosenfeld, J. M. | EPA-650/1-74-003 |
| Householder, M. K. | EPA-660/2-73-032 |
| Howell, M. P. | EPA-600/5-75-002 |
| Howes, J. R. | EPA-670/2-73-041 |
| Hoyland, J. R. | EPA-660/2-74-004 |
| Hoyland, J. R. | EPA-660/2-74-048 |
| Hoyt, A. | EPA-650/2-75-003 |
| Hrutfiord, B. F. | EPA-660/2-74-069 |
| Huang, C. H. | EPA-670/2-75-037 |
| Hubber, C. O. | EPA-670/2-73-079 |
| Huber, W. C. | EPA-600/5-74-013 |
| Huber, W. C. | EPA-670/2-75-017 |
| Huber, W. C. | EPA-670/2-75-022 |
| Hudson, J. F. | EPA-670/2-75-026a |
| Hudson, J. F. | EPA-670/2-75-026b |
| Hufschmidt, M. M. | EPA-600/5-73-015 |
| Hughes Jr., E. E. | EPA-600/2-74-002 |
| Hughes, E. E. | EPA-600/2-75-009 |
| Humbel, D. E. | EPA-660/2-73-017 |
| Hunt, G. W. | EPA-660/3-74-006 |
| Ifeader, C. | EPA-600/5-74-016 |
| Ifeadi, C. | EPA-670/2-75-058 |
| Ifeadi, C. N. | EPA-670/2-75-049 |
| Iglar, A. F. | EPA-670/2-73-048 |
| Ingersoll, R. B. | EPA-650/2-73-043 |
| Irwin, W. A. | EPA-600/5-74-026 |
| Irwin, W. A. | EPA-600/5-74-025 |
| Iura T. | EPA-650/2-73-014 |
| Jobb, D. C. | EPA-660/3-74-014 |
| Jackson, K. | EPA-660/2-74-087 |
| Jacob, B. L. | EPA-660/2-74-019 |
| Jacobs, T. O. | EPA-670/2-73-086 |
| Jacobsen, W. E. | EPA-600/2-75-007a |
| Jahnig, C. E. | EPA-650/2-74-009a |
| Jaksch, J. A. | EPA-600/5-74-017 |
| Jamgochian, E. M. | EPA-600/2-75-011 |
| Jarmuth, R. A. | EPA-660/2-73-023 |
| Jaryinen, A. W. | EPA-660/3-74-024 |
| Jaworski, E. | EPA-660/3-74-029 |
| Jaye, F. | EPA-650/2-74-013 |
| Jedlicka, C. | EPA-660/2-73-004 |
| Jhaveri, N. | EPA-650/2-73-036 |
| Johannsen, G. L. | EPA-670/2-75-027 |
| Johannsan, G. L. | EPA-670/2-74-077 |
| Johanson, L. N. | EPA-660/2-74-069 |
| Johns, F. B. | EPA-680/4-75-001 |
| Johnson, D. E. | EPA-650/1-74-003 |
| Johnson, L. D. | EPA-650/2-74-050 |
| Johnson, T. E. | EPA-650/2-74-012 |
| Johnson, W. B. | EPA-650/4-73-002 |
| Johnston, D. R. | EPA-600/5-74-009 |
| Johnston, H. S. | EPA-650/4-74-004 |
| Jokela, A. | EPA-600/5-74-023 |
| Jolley, R. | EPA-660/2-74-076 |
| Jones, I. S. F. | EPA-660/2-74-082 |
| Jones, R. H. | EPA-660/2-75-001 |
| Jones, R. S. | EPA-660/3-73-005 |
| Jordan, D. M. | EPA-670/2-74-097 |
| Jordening, D. L. | EPA-600/5-73-008a |
| Jordening, D. L. | EPA-600/5-73-008b |
| Jordening, D. L. | EPA-600/5-74-014 |
| Jordening, D. L. | EPA-600/5-74-028 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Jorgensen, R. | EPA-600/5-74-019 |
| Jorque, M. A. | EPA-660/2-74-077 |
| Joyce, J. M. | EPA-670/2-74-037 |
| Joyce, M. | EPA-670/2-75-045 |
| Julian, E. C. | EPA-670/4-75-004b |
| Julian, E. C. | EPA-670/4-75-004a |
| Justice, C. A. | EPA-660/3-73-015 |
| Kah, R. C.Y. | EPA-660/2-73-029 |
| Kahn, B. | EPA-670/4-75-006 |
| Kaiser, E. J. | EPA-600/5-73-015 |
| Kaiser, E. L. | EPA-670/2-73-023 |
| Kalfadelis, C. D. | EPA-650/2-74-009b |
| Kambhu, K. | EPA-670/2-73-061 |
| Kania, H. J. | EPA-660/3-73-025 |
| Kaplovsky, A. J. | EPA-670/2-73-027 |
| Karandikar, S. | EPA-670/2-73-011 |
| Kardos, L. T. | EPA-660/2-74-016 |
| Kardos, L. T. | EPA-660/2-74-003 |
| Karuvian, J. F. | EPA-680/4-74-002 |
| Katz, S. | EPA-660/2-74-076 |
| Kaufman, J. A. | EPA-670/2-75-031 |
| Keeney, D. R. | EPA-660/3-73-024 |
| Keier, P. M. | EPA-670/2-74-037 |
| Keitz, E. L. | EPA-600/2-74-004 |
| Kelly, J. A. | EPA-670/2-73-030 |
| Kendall, D. A. | EPA-650/2-73-025 |
| Kenney, B. C. | EPA-660/2-74-082 |
| Kent, G. C. | EPA-670/2-74-067 |
| Kern, P. L. | EPA-670/2-75-016 |
| Kesselring, R. C. | EPA-650/2-74-023 |
| Ketchum, L. A. | EPA-670/2-74-047 |
| Keys, J. M. | EPA-600/5-74-024 |
| Kimmelstein, B. | EPA-600/5-73-012e |
| Kincannon, B. | EPA-600/5-74-032 |
| King, A. H. | EPA-660/2-73-018 |
| King, L. G. | EPA-660/2-75-005 |
| Kingston, J. C. | EPA-660/3-75-004 |
| Kirchmer, C. J. | EPA-660/2-74-021 |
| Kittelson, D. B. | EPA-650/3-73-002 |
| Klein, D. H. | EPA-660/2-73-008 |
| Knudson, W. | EPA-660/2-74-088 |
| Kobayashi, S. | EPA-670/2-74-063 |
| Kocmond, W. C. | EPA-650/3-73-002 |
| Koehrsen, L. G. | EPA-660/2-74-014 |
| Koenst, W. M. | EPA-660/3-75-017 |
| Koogler, J. B. | EPA-650/2-73-007 |
| Kopp Jr., C. V. | EPA-660/2-73-033 |
| Koppel, L. M. | EPA-600/5-75-001 |
| Kos, P. | EPA-670/2-74-037 |
| Kraft, M. L. | EPA-650/2-74-025 |
| Krajeski, E. P. | EPA-600/2-74-004 |
| Krajeski, E. P. | EPA-600/2-75-011 |
| Kramer, M. | EPA-670/2-74-078 |
| Krause, H. H. | EPA-670/2-74-083 |
| Krause, H. H. | EPA-670/2-74-084 |
| Krause, H. H. | EPA-670/2-75-058 |
| Kreusch, E. | EPA-660/2-74-007 |
| Kroner, R. C. | EPA-670/4-74-008 |
| Krope, E. | EPA-600/2-74-001 |
| Krueger, W. F. | EPA-670/2-73-041 |
| Kuhner, J. | EPA-670/2-74-038 |
| Kuhner, J. | EPA-670/2-74-065 |
| Kuhner, J. | EPA-670/2-74-068 |
| Kuhrtz, S. | EPA-670/2-73-011 |
| Kurg, E. K. | EPA-670/2-74-043 |
| Kursch, S. J. | EPA-600/5-73-012c |
| La Rosa, P. J. | EPA-670/2-74-001 |
| Lackey, L. L. | EPA-670/2-73-086 |
| Lager, J. A. | EPA-670/2-74-040 |
| Lager, J. A. | EPA-670/2-74-090 |
| Lakomski, T. D. | EPA-670/2-74-091 |
| Lancy, L. E. | EPA-670/2-75-015 |
| Landreth, R. | EPA-670/2-75-005 |
| Landreth, R. E. | EPA-670/2-74-088 |
| Landrigan, R. B. | EPA-670/2-75-055 |
| Lang, E. W. | EPA-660/2-75-004 |
| Larson, D. H. | EPA-650/2-73-033b |
| Larson, D. H. | EPA-650/2-73-033a |
| Larson, R. | EPA-660/2-75-008 |
| Larson, T. E. | EPA-670/2-73-029 |
| Lassiter, R. R. | EPA-660/3-75-012 |
| Laster, L. L. | EPA-650/2-73-046 |
| Lauch, R. P. | EPA-670/4-74-007 |
| Lauch, R. P. | EPA-670/4-75-001 |
| Lauch, R. P. | EPA-670/4-75-003 |
| Laughlin, J. E. | EPA-670/2-73-060 |
| Laver, M. L. | EPA-670/2-73-005 |
| Lavergne, E. A. | EPA-600/2-74-006 |
| Lawhon, W. | EPA-600/5-74-016 |
| Lawless, E. W. | EPA-670/2-75-057 |
| LaBeau, B. | EPA-670/2-73-103 |
| Leary, R. D. | EPA-670/2-73-050 |
| Leatherwood, J. M. | EPA-670/2-73-090 |
| Lebowitz, H. E. | EPA-650/2-75-038 |
| Leckie, J. O. | EPA-670/2-73-010 |
| Lee J. H. | EPA-660/3-75-015 |
| Lee, A. A. | EPA-650/2-74-025 |
| Lee, G. F. | EPA-660/3-75-022 |
| Lee, J. M. | EPA-660/3-75-016 |
| Lee, S. H. | EPA-670/2-73-082 |
| Lee, W. L. | EPA-660/3-75-013 |
| Leekley, R. M. | EPA-660/2-74-029 |
| Leiro, C. C. | EPA-650/2-74-010 |
| Leith, D. | EPA-650/2-73-036 |
| Lemer, A. | EPA-600/5-74-001 |
| Lenny, J. | EPA-660/2-74-054 |
| Leonard, J. W. | EPA-670/2-74-002 |
| Leonard, R. P. | EPA-670/2-75-042 |
| Levia, J. E. | EPA-660/2-73-026 |
| Levine, S. | EPA-660/3-75-021 |
| Levins, P. L. | EPA-650/2-73-032 |
| Levins, P. L. | EPA-650/2-73-025 |
| Levins, P. L. | EPA-650/2-73-023 |
| Levins, P. L. | EPA-670/2-74-086 |
| Levis, A. H. | EPA-670/2-75-030 |
| Lewis, C. S. | EPA-600/5-73-012d |
| Lewis, D. H. | EPA-600/5-74-003 |
| Lewis, D. L. | EPA-660/3-75-007 |
| Lewis, P. A. | EPA-670/4-74-006 |
| Lewis, R. F. | EPA-670/9-75-004 |
| Lezenga, D. R. | EPA-660/3-74-028 |
| Libby Jr., K. | EPA-670/2-74-044 |
| Lichtenberg, J. J. | EPA-670/4-74-008 |
| Lichtenberg, J. J. | EPA-670/4-74-009 |
| Liebman, J. C. | EPA-670/2-74-036a |
| Lillard, D. A. | EPA-660/4-75-002 |
| Lipper, R. I. | EPA-660/2-75-013 |
| Lippert, T. E. | EPA-670/2-74-017 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Liroff, R. A. | EPA-600/5–74–026 |
| Liroff, R. A. | EPA-600/5–74–025 |
| Liskowitz, J. W. | EPA-670/2–75–002 |
| Little, R. L. | EPA-670/4–74–003a |
| Liu, D. H. | EPA-660/3–75–016 |
| Liu, D. H. W. | EPA-660/2–74–036 |
| Llewellyn, L. | EPA-600/5–73–012a |
| Loehu, P. Y. | EPA-660/2–74–063 |
| Lotspeich, F. B. | EPA-660/3–74–009 |
| Lotspeich, F. B. | EPA-660/3–75–020 |
| Lovell, H. L. | EPA-670/2–73–093 |
| Lowe, R. L. | EPA-670/4–74–005 |
| Ludwig, C. B. | EPA-650/2–73–026 |
| Ludwig, F. L. | EPA-650/3–73–001 |
| Lueck, B. F. | EPA-660/2–73–030 |
| Luecke, D. F. | EPA-600/5–75–001 |
| Lund, D. B. | EPA-660/2–74–006 |
| Lunsford, J. H. | EPA-650/3–74–006 |
| Maase, D. L. | EPA-670/2–75–049 |
| Macon, J. | EPA-660/2–74–031 |
| MacIntyre, W. G. | EPA-670/2–73–099 |
| Magee, E. M. | EPA-650/2–74–009b |
| Magee, E. M. | EPA-650/2–74–009a |
| Maher, M. | EPA-670/2–74–049 |
| Mahida, V. U. | EPA-670/2–75–010 |
| Maigetter, R. Z. | EPA-650/1–73–002 |
| Makrides, A. C. | EPA-600/5–75–002 |
| Malisch, W. R. | EPA-670/2–73–038 |
| Malisch, W. R. | EPA-670/2–75–053 |
| Manabe, R. | EPA-660/2–73–039 |
| Mancuso, R. L. | EPA-650/3–73–001 |
| Manges, H. L. | EPA-660/2–75–013 |
| March, F. | EPA-670/2–75–024 |
| Marcus, H. J. | EPA-660/2–74–036 |
| Markle, R. A. | EPA-670/2–75–058 |
| Markley, O. W. | EPA-600/5–75–012 |
| Marks, D. H. | EPA-670/2–75–026a |
| Marks, D. H. | EPA-670/2–75–026b |
| Marrone, W. A. | EPA-650/2–74–008a |
| Marshall, D. W. | EPA-670/2–74–076b |
| Marshall, H. E. | EPA-600/5–74–031 |
| Martel, C. J. | EPA-670/2–74–065 |
| Martin, D. B. | EPA-660/3–75–010 |
| Martin, E. J. | EPA-670/2–74–073 |
| Martin, E. J. | EPA-670/2–74–013 |
| Martin, E. J. | EPA-670/2–75–056 |
| Martin, G. B. | EPA-650/2–73–031 |
| Martin, K. L. | EPA-660/2–73–017 |
| Mason, G. J. | EPA-670/2–74–061 |
| Massaro, E. J. | EPA-660/3–74–027 |
| Massucco, A. A. | EPA-650/2–73–032 |
| Matthew, F. L. | EPA-670/2–73–088 |
| Maudlin, A. F. | EPA-660/2–74–061 |
| Maxwell, M. A. | EPA-650/2–73–038 |
| Mayes, J. | EPA-670/2–74–057 |
| McCain, J. D. | EPA-650/2–73–035 |
| McCain, J. D. | EPA-650/2–74–028 |
| McCall, A. C. | EPA-660/2–73–034 |
| McCann, C. | EPA-650/2–74–038 |
| McCann, R. A. | EPA-650/2–74–011 |
| McCarthy, J. L. | EPA-660/2–74–069 |
| McCauley, B. | EPA-660/9–74–001 |
| McClenny, W. A | EPA-650/2–74–046b |
| McCoy, J. | EPA-650/2–73–023 |
| McDermott, R. G. | EPA-670/5–73–021 |
| McDonald, H. | EPA-650/2–73–045 |
| McElroy, A. D. | EPA-600/5–75–004 |
| McElroy, S. W. | EPA-600/5–74–020 |
| McGarvey, R. J. | EPA-670/2–74–001 |
| McGlamery, G. G. | EPA-600/2–75–006 |
| McIlhenny, W. F. | EPA-660/3–74–019 |
| McIlhenny, W. F. | EPA-660/3–73–006 |
| McIntyre, C. | EPA-670/2–74–015 |
| McKean, W. T. | EPA-650/2–74–005 |
| McKee, H. C. | EPA-660/3–74–026 |
| McKee, M. | EPA-600/5–74–021 |
| McMahon, T. S. | EPA-670/2–74–053 |
| McMichael, W. F. | EPA-670/2–74–010 |
| McMichael, W. F. | EPA-670/2–74–011 |
| McMichael, W. F. | EPA-670/2–74–006 |
| McNabb, J. F. | EPA-660/2–73–014 |
| McNaught, D. C. | EPA-660/3–75–021 |
| McNelis, D. N. | EPA-680/4–74–001 |
| McWhorter, D. B. | EPA-670/2–75–048 |
| Meadows, E. U. | EPA-650/2–73–007 |
| Meakin, J. D. | EPA-650/2–73–016 |
| Medina, M. A. | EPA-670/2–75–022 |
| Medina, M. A. | EPA-670/2–75–017 |
| Meier, P. M. | EPA-670/2–74–038 |
| Meier, P. M. | EPA-670/2–74–065 |
| Meier, P. M. | EPA-670/2–74–068 |
| Meier, P. M. | EPA-670/2–74–066 |
| Meiners, A. F. | EPA-670/2–75–057 |
| Meisel, W. S. | EPA-650/4–74–001 |
| Mekinda, M. | EPA-660/2–74–083 |
| Melcher, A. G. | EPA-600/5–75–008 |
| Meloy, T. P. | EPA-670/2–73–068 |
| Melvin, P. | EPA-670/2–75–003 |
| Melvin, P. | EPA-670/2–75–044 |
| Melvin, P. | EPA-670/2–75–059 |
| Mentz, J. W. | EPA-670/2–75–047 |
| Mercer, B. W. | EPA-670/2–73–078 |
| Mercer, W. A. | EPA-660/2–74–091 |
| Merritt, L. B. | EPA-660/2–75–007 |
| Merryman, L. | EPA-660/2–75–003 |
| Meyer, C. F. | EPA-600/4–73–001b |
| Meyers, R. A. | EPA-650/2–74–025 |
| Meyers, S. P. | EPA-660/3–75–001 |
| Michalovic, J. G. | EPA-670/2–75–042 |
| Middlebrooks, E. J. | EPA-670/9–75–004 |
| Milgrom, J. | EPA-670/5–74–003 |
| Miller Jr., H. H. | EPA-660/2–74–011 |
| Miller, B. F. | EPA-670/2–73–009 |
| Miller, C. J. | EPA-650/5–73–002 |
| Miller, D. W. | EPA-660/2–74–056 |
| Miller, D. W. | EPA-660/3–75–018 |
| Miller, E. C. | EPA-660/2–74–057 |
| Miller, E. L. | EPA-670/2–75–037 |
| Miller, P. D. | EPA-670/2–73–032 |
| Miller, R. H. | EPA-670/2–74–074 |
| Miller, R. L. | EPA-660/2–75–004 |
| Mills, T. R. | EPA-660/2–74–071 |
| Miner, J. R. | EPA-660/2–74–009 |
| Miner, J. R. | EPA-660/2–74–023 |
| Miner, J. R. | EPA-670/2–73–025 |
| Minton, G. L. | EPA-670/2–74–061 |
| Mitchell, R. C. | EPA-670/2–73–031 |
| Miura, R. | EPA-660/2–74–021 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Moffa, P. E. | EPA-670/2-75-021 |
| Moghissi, A. A. | EPA-680/4-74-001 |
| Mole, J. W. | EPA-670/2-74-036b |
| Molvar, A. E. | EPA-670/2-73-104 |
| Molvar, A. E. | EPA-670/2-74-087 |
| Monaghan, D. A. | EPA-670/2-74-021 |
| Moomau, H. F. | EPA-670/2-74-002 |
| Moore, D. O. | EPA-650/2-74-012 |
| Moore, J. | EPA-600/5-74-016 |
| Moore, J. G. | EPA-600/5-73-011 |
| Moore, R. V. | EPA-660/2-74-045 |
| Morgan, D. R. | EPA-650/2-74-046a |
| Morin, D. C. | EPA-670/2-75-011 |
| Mornea, G. A. | EPA-670/2-74-030 |
| Morris, J. C. | EPA-600/1-75-002 |
| Morrison, D. E. | EPA-600/5-74-011 |
| Morrison, J. E. | EPA-670/2-73-074 |
| Morrison, S. M. | EPA-660/2-73-017 |
| Morrow, J. E. | EPA-660/3-73-018 |
| Moyer, J. E. | EPA-660/2-74-066 |
| Moyer, J. E. | EPA-660/2-74-065 |
| Mrosla, E. | EPA-660/3-75-014 |
| Mudge, L. K. | EPA-670/2-75-014 |
| Mueller, E. W. | EPA-660/3-75-019 |
| Mueller, E. W. | EPA-660/3-75-020 |
| Mueller, H. F. | EPA-670/2-73-029 |
| Mullen, K. T. | EPA-600/4-75-001 |
| Munday, J. C. | EPA-670/2-73-099 |
| Murfee, G. | EPA-660/2-73-025b |
| Murphy, J. S. | EPA-600/2-74-007 |
| Murphy, J. S. | EPA-600/2-75-005 |
| Murphy, L. S. | EPA-660/2-75-013 |
| Murphy, L. S. | EPA-660/2-75-010 |
| Murray, R. G. | EPA-600/2-75-009 |
| Myers, E. | EPA-660/2-74-016 |
| Myronowski, J. A. | EPA-600/5-74-018 |
| Nack, H. | EPA-650/2-75-038 |
| Nader, J. S. | EPA-650/2-74-013 |
| Narbozgi, A. D. | EPA-660/2-73-020 |
| Nash, C. E. | EPA-660/3-75-015 |
| Nawrocki, M. A. | EPA-600/2-73-002 |
| Nawrocki, M. A. | EPA-660/2-73-035 |
| Nawrocki, M. A. | EPA-660/2-74-071 |
| Nawrocki, M. A. | EPA-660/2-74-073 |
| Nawrocki, M. A. | EPA-660/2-74-072 |
| Neel, J. K. | EPA-660/3-73-001 |
| Neher, M. B. | EPA-660/2-74-048 |
| Nelson Jr., A. C. | EPA-650/4-74-005a |
| Nelson, D. | EPA-660/2-74-043 |
| Nelson, G. R. | EPA-660/2-74-089 |
| Nelson, O. F. | EPA-670/2-75-019 |
| Nesbitt, J. | EPA-660/2-74-016 |
| Neshein, E. E. | EPA-670/2-73-088 |
| Neveril, R. B. | EPA-670/2-74-043 |
| Newher, M. B. | EPA-660/2-74-004 |
| Newport, B. D. | EPA-660/2-74-066 |
| Novotny, J. F. | EPA-660/3-75-010 |
| Nutkis, M. S. | EPA-650/2-74-001 |
| O'Brien, P. J. | EPA-670/2-74-086 |
| O'Connor, D. J. | EPA-660/3-73-009 |
| O'Farrell, T. P. | EPA-670/2-73-040 |
| O'Grady, T. J. | EPA-670/2-74-091 |
| O'Herron, R. J. | EPA-670/4-73-018 |
| O'Herron, R. J. | EPA-670/4-74-001 |
| O'Herron, R. J. | EPA-670/4-75-005 |
| O'Melia, C. R. | EPA-670/2-74-032 |
| Oberacker, D. A. | EPA-670/2-75-025 |
| Ogea, J. | EPA-660/2-73-018 |
| Ojala, C. | EPA-660/3-74-029 |
| Olsen, M. B. | EPA-600/5-73-012d |
| Ongerth, R. H. | EPA-670/5-74-005 |
| Ottinger, R. S. | EPA-670/2-73-053J |
| Ottinger, R. S. | EPA-670/2-73-053D |
| Ottinger, R. S. | EPA-670/2-73-053G |
| Ottinger, R. S. | EPA-670/2-73-053B |
| Ottinger, R. S. | EPA-670/2-73-053L |
| Ottinger, R. S. | EPA-670/2-73-053C |
| Ottinger, R. S. | EPA-670/2-73-053N |
| Ottinger, R. S. | EPA-670/2-73-053A-P |
| Ottinger, R. S. | EPA-670/2-73-053F |
| Ottinger, R. S. | EPA-670/2-73-053K |
| Ottinger, R. S. | EPA-670/2-73-053O |
| Ottinger, R. S. | EPA-670/2-73-053M |
| Ottinger, R. S. | EPA-670/2-73-053E |
| Ottinger, R. S. | EPA-670/2-73-053A |
| Ottinger, R. S. | EPA-670/2-73-053I |
| Ottinger, R. S. | EPA-670/2-73-053H |
| Ottinger, R. S. | EPA-670/2-73-053P |
| Owen, P. H. | EPA-670/2-75-028 |
| Oxley, J. H. | EPA-650/2-75-038 |
| Pade, B. | EPA-660/2-74-083 |
| Page, A. L. | EPA-670/2-74-005 |
| Paik, I. | EPA-600/5-74-020 |
| Pamatmat, M. M. | EPA-660/3-73-005 |
| Pantazelos, T. G. | EPA-670/2-75-004 |
| Paris, D. F. | EPA-660/3-75-007 |
| Park, W. R. | EPA-600/5-74-007 |
| Park, W. R. | EPA-660/2-74-047 |
| Parkasam, T. B. S. | EPA-660/2-74-063 |
| Parker, F. L. | EPA-660/2-73-012 |
| Parker, G. B. | EPA-660/2-74-009 |
| Parker, H. W. | EPA-660/2-74-090 |
| Parkhurst, J. D. | EPA-670/2-73-043 |
| Parks, J. W. | EPA-670/2-74-079 |
| Pathak, A. A. | EPA-670/5-74-007 |
| Patmore, L. C. | EPA-660/2-73-003 |
| Patrick, R. | EPA-660/2-75-008 |
| Patterson, J. | EPA-600/2-74-009b |
| Patterson, J. | EPA-600/2-74-009a |
| Patterson, J. | EPA-600/2-74-009c |
| Pattnaik, A. | EPA-650/2-73-016 |
| Patzer, R. G. | EPA-680/4-74-001 |
| Pavia, E. H. | EPA-670/2-73-067 |
| Payne, W. R. | EPA-660/2-74-017 |
| Peabody, F. P. | EPA-660/2-74-057 |
| Pearson, E. F. | EPA-660/2-74-050 |
| Pek, S. L. | EPA-670/2-75-042 |
| Peltz, W. A. | EPA-670/2-75-017 |
| Peltz, W. A. | EPA-670/2-75-022 |
| Pembrook, J. D. | EPA-650/2-73-030 |
| Pengidore, D. A. | EPA-650/2-73-028 |
| Penose Jr., R. G. | EPA-670/2-73-081 |
| Penrod, L. | EPA-660/2-74-087 |
| Pepper, J. | EPA-600/5-74-019 |
| Perez, A. I. | EPA-600/5-74-013 |
| Perrotte, W. | EPA-670/2-74-063 |
| Pershing, D. W. | EPA-650/2-73-029 |
| Pershing, D. W. | EPA-650/2-73-031 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Peters, E. T. | EPA-650/2-73-023 |
| Petersack, J. F. | EPA-670/2-75-039 |
| Peterson, H. C. | EPA-670/2-75-016 |
| Peterson, M. L. | EPA-670/2-73-001 |
| Peterson, S. | EPA-660/9-74-002 |
| Peterson, S. A. | EPA-660/3-73-001 |
| Peterson, S. A. | EPA-660/3-74-032 |
| Pfeffer, F. M. | EPA-660/2-74-067 |
| Pfeffer, J. T. | EPA-670/2-74-016 |
| Phillips, J. H. | EPA-660/3-75-013 |
| Phillips, S. A. | EPA-670/2-73-022 |
| Pidot, G. | EPA-600/5-74-027 |
| Pievge, J. D. | EPA-660/2-74-057 |
| Pilcher, K. S. | EPA-660/3-73-020 |
| Pilie, R. J. | EPA-670/2-75-042 |
| Pitt, W. | EPA-660/2-74-076 |
| Plyler, E. L. | EPA-650/2-73-038 |
| Polcyn, F. C. | EPA-660/3-74-028 |
| Pomeroy, B. S. | EPA-660/2-75-012 |
| Pomeroy, B. S. | EPA-670/2-73-051 |
| Pontuies, U. R. | EPA-670/2-73-067 |
| Porcella, D. B. | EPA-600/5-74-010 |
| Posner, J. C. | EPA-670/2-75-061 |
| Pound, C. E. | EPA-660/2-73-006b |
| Pound, C. E. | EPA-660/2-73-006a |
| Powers, C. F. | EPA-660/3-74-015 |
| Powers, C. F. | EPA-660/3-74-032 |
| Powers, J. J. | EPA-660/4-73-002 |
| Powers, W. L. | EPA-660/2-75-013 |
| Powers, W. L. | EPA-660/2-75-010 |
| Pows, B. L. | EPA-660/3-73-006 |
| Prescott, G. W. | EPA-660/3-74-023 |
| Pressley, T. A. | EPA-670/2-73-058 |
| Pressley, T. A. | EPA-670/2-73-075 |
| Preston, E. H. | EPA-600/5-74-002 |
| Pringer, C. J. | EPA-670/2-74-092 |
| Proctor, D. E. | EPA-660/2-74-030 |
| Propheter, O. W. | EPA-660/2-74-045 |
| Purdom, P. W. | EPA-670/2-73-057 |
| Putmann, A. A. | EPA-650/2-74-011 |
| Pyatt, E. E. | EPA-600/5-74-013 |
| Rabe, F. T. | EPA-600/5-75-002 |
| Raben, I | EPA-650/2-73-013 |
| Rains, B. A. | EPA-670/2-73-098 |
| Rainwater, F. H. | EPA-660/2-73-016 |
| Ralls, J. W. | EPA-660/2-74-091 |
| Ramanathan, R. | EPA-600/5-75-010 |
| Ramm, W. | EPA-600/5-75-010 |
| Ramos, E. | EPA-660/2-74-074 |
| Ramsey, R. H. | EPA-660/2-75-003 |
| Ramsey, R. J. | EPA-660/2-74-024 |
| Raphael, C. N. | EPA-660/3-74-029 |
| Rapp, J. R. | EPA-670/2-74-009 |
| Rappaport, A. | EPA-600/5-73-012b |
| Ratsch, H. C. | EPA-660/3-74-018 |
| Ratsch, H. C. | EPA-660/3-74-012 |
| Rayyan, Fawzi | EPA-660/2-73-025a |
| Rechnitz, G. A. | EPA-660/2-74-079 |
| Reeves, W. R. | EPA-670/2-75-034 |
| Refrancois, P. A. | EPA-650/2-74-012 |
| Register, J. W. | EPA-650/1-74-003 |
| Reh, C. W. | EPA-670/2-75-035 |
| Reichert, P. A. | EPA-600/5-73-015 |
| Reid, G. W. | EPA-660/2-74-037 |
| Reimers, R. | EPA-600/5-74-016 |
| Reiner, R. | EPA-650/2-73-009 |
| Reiners, R. S. | EPA-600/5-74-005 |
| Remus, G. A. | EPA-670/2-74-043 |
| Reyna, R. | EPA-600/5-73-012b |
| Rhee, S. S. | EPA-670/2-74-019 |
| Ricciardella, K. A. | EPA-670/2-74-001 |
| Rich, S. R. | EPA-670/2-75-004 |
| Richardson, D. L. | EPA-670/2-74-045 |
| Richardson, D. L. | EPA-670/2-74-033 |
| Richardson, S. L. | EPA-670/2-75-021 |
| Richardson, W. H. | EPA-670/2-75-019 |
| Riley, R. G. | EPA-660/2-74-081 |
| Ringe, R. R. | EPA-660/3-73-017 |
| Roan, S. G. | EPA-670/2-73-075 |
| Robbins, G. M. | EPA-600/5-74-024 |
| Robbins, J. H. | EPA-670/2-74-056 |
| Roberts, D. L. | EPA-650/2-74-046a |
| Robertson, A. | EPA-660/3-74-006 |
| Robertson, J. | EPA-660/2-74-077 |
| Robins, J. D. | EPA-670/2-73-054 |
| Robinson, D. | EPA-670/2-74-044 |
| Robinson, G. M. L. | EPA-670/2-74-073 |
| Robinson, J. W. | EPA-650/2-73-011 |
| Robinson, S. J. | EPA-600/5-75-001 |
| Roden III, J. J. | EPA-670/2-74-030 |
| Rodriguez, J. | EPA-660/2-74-074 |
| Roesler, J. F. | EPA-670/2-73-104 |
| Roessler, M. | EPA-660/3-74-014 |
| Roessler, W. U. | EPA-650/2-73-014 |
| Rogers, C. | EPA-670/2-75-005 |
| Rogers, C. J. | EPA-670/2-74-088 |
| Romkens, M. J. M. | EPA-660/2-74-043 |
| Rosenblatt, T. M. | EPA-670/2-74-004 |
| Ross, L. W. | EPA-670/2-73-080 |
| Roth, C. | EPA-660/2-74-043 |
| Rothwell, D. F | EPA-670/2-73-063 |
| Rovesti, W. C. | EPA-650/2-73-041 |
| Rowe, M. L. | EPA-660/2-75-003 |
| Royal, T. M. | EPA-650/2-74-019 |
| Rozelle, R. | EPA-670/2-75-006 |
| Rozielle, L. T. | EPA-660/2-73-033 |
| Rubin, C. | EPA-600/5-73-016 |
| Ruegg, R. T. | EPA-600/5-74-031 |
| Ruich, D. A. | EPA-600/2-73-004 |
| Ruiz, Jr., L. P. | EPA-670/2-75-032 |
| Ruth, L. A. | EPA-650/2-74-001 |
| Ryans, B. | EPA-650/4-74-002 |
| Ryland, D. W. | EPA-670/4-73-002 |
| Sack, W. A. | EPA-670/2-73-022 |
| Sadler, W. W. | EPA-670/2-75-035 |
| Sahagian, J. | EPA-600/5-74-032 |
| Saigh, P. A. | EPA-670/2-75-007 |
| Saila, S. B. | EPA-600/3-75-001 |
| Salomon, L. L. | EPA-680/4-75-003 |
| Salvin, V. S. | EPA-650/3-74-008 |
| Sanborn, H. | EPA-660/3-73-005 |
| Sanborn, J. R. | EPA-660/3-74-025 |
| Sanders, R. G. | EPA-670/2-75-004 |
| Sandoski, D. A. | EPA-600/2-74-007 |
| Sandoski, D. A. | EPA-600/2-74-005 |
| Sanville, W. D. | EPA-660/3-74-032 |
| Sanville, W. D. | EPA-660/3-74-015 |
| Sargent, D. H. | EPA-600/2-73-004 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Sarofim, A. F. | EPA-670/2-73-089B |
| Sarofim, A. F. | EPA-670/2-73-089A |
| Savino, M. | EPA-600/5-73-012e |
| Saxton, J. C. | EPA-670/2-74-078 |
| Schacht, R. A. | EPA-660/3-74-002 |
| Schaedel, A. L. | EPA-660/3-75-004 |
| Schafer, P. H. | EPA-600/5-75-001 |
| Scherifig, J. | EPA-660/3-73-015 |
| Schmalensee, R. | EPA-600/5-75-010 |
| Schmer, F. A. | EPA-670/4-73-002 |
| Schmid, L. A. | EPA-660/2-75-013 |
| Schmidt, C. J. | EPA-660/2-74-075 |
| Schmidt, C. J. | EPA-670/2-75-038 |
| Schmidt, F. A. | EPA-670/2-73-091 |
| Schmidt, R. A. | EPA-600/2-74-002 |
| Schoenberger, R. J. | EPA-670/2-73-057 |
| Schoettger, R. A. | EPA-660/3-75-011 |
| Schoor, W. P. | EPA-660/3-74-024 |
| Schoor, W. P. | EPA-660/3-74-013 |
| Schroeder, E. D. | EPA-660/2-75-002 |
| Schultz, G. R. | EPA-670/9-73-056 |
| Schultz, W. | EPA-670/2-75-045 |
| Schwartz, A. M. | EPA-600/2-74-003 |
| Schwartz, W. | EPA-650/3-74-011 |
| Schweikhardt, R. G. | EPA-670/2-74-024B |
| Schweikhardt, R. G. | EPA-670/2-74-024A |
| Scott, P. | EPA-600/5-73-012d |
| Scott, T. W. | EPA-660/2-74-063 |
| Scotton, J. W. | EPA-600/4-75-001 |
| Seidman, H. | EPA-660/2-73-003 |
| Seitz, W. R. | EPA-660/2-73-009 |
| Seitz, W. R. | EPA-660/2-73-007 |
| Selker, A. P. | EPA-650/2-73-005 |
| Selleck, R. E. | EPA-660/3-74-016 |
| Sem, G. J. | EPA-650/2-73-022 |
| Seng, W. C | EPA-660/2-73-015 |
| Senturia, S. D. | EPA-670/2-75-040 |
| Sewell, R. J. | EPA-670/2-75-060 |
| Seyler, J. K. | EPA-660/2-73-032 |
| Shafizadeh, F. | EPA-670/2-74-015 |
| Shaheen, D. G. | EPA-600/2-75-004 |
| Shannon, L. J. | EPA-600/5-74-007 |
| Shareskin, M. | EPA-600/5-74-033 |
| Sharpin, R. E. | EPA-660/2-73-036 |
| Shaw, H. | EPA-650/2-74-001 |
| Shaw, H. | EPA-650/2-74-009a |
| Shea, T. | EPA-660/2-74-074 |
| Sheikh, H. | EPA-670/2-75-017 |
| Sheikh, H. | EPA-670/2-75-022 |
| Sherrill, J. D. | EPA-670/2-75-046 |
| Shirazi, M. A. | EPA-660/2-73-016 |
| Shoffstall, D. R. | EPA-650/2-73-033b |
| Shoffstall, D. R. | EPA-650/2-73-033a |
| Shofner, F. M. | EPA-660/2-73-011 |
| Sholtes, R. S. | EPA-650/2-73-007 |
| Shuckrow, A. J. | EPA-670/2-73-078 |
| Shuckrow, A. J. | EPA-670/2-75-012 |
| Shuster, W. W. | EPA-670/2-74-063 |
| Sibbett, D. J. | EPA-650/2-73-052 |
| Silverstein, R. M. | EPA-660/2-74-081 |
| Simon, G. R. | EPA-600/2-75-010 |
| Simpson, J. D. | EPA-600/5-75-007 |
| Simpson, J. P. | EPA-600/2-75-006 |
| Siner, R. D. | EPA-670/5-74-001 |
| Singley, J. E. | EPA-660/2-74-021 |
| Sisson, R. L. | EPA-600/5-74-008 |
| Sitek, G. | EPA-660/2-74-073 |
| Skogerboe, G. | EPA-660/2-74-084 |
| Skogerboe, G. V. | EPA-660/2-74-049 |
| Skogerboe, G. V. | EPA-660/2-74-052 |
| Skogerboe, G. V. | EPA-670/2-75-048 |
| Skogerboe, R. K. | EPA-670/2-75-048 |
| Skrentner, R. G. | EPA-670/2-75-020 |
| Skriba, M. C. | EPA-670/2-74-017 |
| Sliger, A. G. | EPA-650/2-74-012 |
| Smallwood, C. | EPA-660/2-73-021 |
| Smallwood, D. | EPA-600/5-75-010 |
| Smallwood, H. | EPA-600/5-73-003 |
| Smith Jr., L. L. | EPA-660/3-75-017 |
| Smith, C. L. | EPA-670/2-73-099 |
| Smith, C. N. | EPA-660/2-74-017 |
| Smith, D. V. | EPA-600/5-75-001 |
| Smith, F. | EPA-650/4-74-005a |
| Smith, F. A. | EPA-660/3-73-007 |
| Smith, G. E. | EPA-660/2-74-068 |
| Smith, G. F. | EPA-670/2-75-017 |
| Smith, J. | EPA-660/2-74-037 |
| Smith, J. D. | EPA-670/2-73-076 |
| Smith, J. E. | EPA-670/2-75-021 |
| Smith, J. S. | EPA-650/5-73-002 |
| Smith, K. D. | EPA-650/2-74-007 |
| Smith, R. | EPA-670/2-73-044 |
| Smith, R. | EPA-670/2-73-045 |
| Smith, R. | EPA-670/2-73-046 |
| Smith, R. | EPA-670/2-74-069 |
| Smith, R. E. | EPA-660/2-74-064 |
| Smith, R. G. | EPA-670/2-75-039 |
| Smith, R. J. | EPA-660/2-74-009 |
| Smith, R. M. | EPA-670/2-74-070 |
| Smith, W. B. | EPA-650/2-74-028 |
| Smith, W. G. | EPA-670/2-74-040 |
| Smith, W. L. | EPA-660/3-73-001 |
| Smithson Jr., G. R. | EPA-650/2-75-038 |
| Smithson Jr., G. R. | EPA-670/2-75-018 |
| Snedden, R. | EPA-650/2-74-038 |
| Snowman, L. R. | EPA-650/2-74-046b |
| Snowman, L. R. | EPA-650/2-74-046a |
| Snyder, A. J. | EPA-660/2-74-039 |
| Sobek, A. | EPA-670/2-74-070 |
| Solls Jr., F. W. | EPA-670/2-73-029 |
| Sommer, J. | EPA-600/5-74-027 |
| Sopper W. E. | EPA-660/2-74-016 |
| Sopper, W. E. | EPA-660/2-74-003 |
| Speaker, D. M. | EPA-600/5-74-015 |
| Speece, R. E. | EPA-660/2-73-025a |
| Speece, R. E. | EPA-660/2-73-025b |
| Spewak, P. | EPA-600/2-75-007a |
| Spewak, P. | EPA-600/2-75-007b |
| Sproul, O. | EPA-660/2-74-088 |
| Spruill, E. L. | EPA-660/2-74-008 |
| Squire, G. R. | EPA-660/2-74-071 |
| Staebler Jr., C. J. | EPA-660/2-73-024 |
| Stalnaker, C. B. | EPA-660/3-73-019 |
| Stamberg, J. B. | EPA-670/2-73-037 |
| Stamberg, J. B. | EPA-670/2-73-033 |
| Stamberg, J. B. | EPA-670/2-75-051 |
| Stamberg, J. B. | EPA-670/2-75-052 |
| Stanbery, J. B. | EPA-670/2-73-073 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Stanland, R. | EPA-600/5-73-015 |
| Starkey, R. J. | EPA-660/3-74-022 |
| Statnick, R. M. | EPA-650/2-74-050 |
| Stay, F. S. | EPA-660/3-74-032 |
| Stefan, H. | EPA-660/3-75-014 |
| Stein, J. L. | EPA-660/2-74-059 |
| Stenhser, A. G. | EPA-660/2-73-010 |
| Stemling, C. V. | EPA-650/2-74-017 |
| Stevens, B. H. | EPA-670/5-74-006 |
| Stevens, D. H. | EPA-670/2-73-060 |
| Stevenson, M. K. | EPA-670/2-73-010 |
| Stevenson, W. S. | EPA-660/3-74-004a |
| Steward, F. A. | EPA-670/2-75-015 |
| Stewart, R. D. | EPA-650/1-73-004 |
| Stewart, S. R. | EPA-670/2-73-086 |
| Stierli, H. | EPA-670/2-73-001 |
| Stoddard, C. K. | EPA-670/2-73-092 |
| Stoermer, E. F. | EPA-660/3-75-004 |
| Stoevener, H. H. | EPA-600/5-74-017 |
| Stone, H. E. | EPA-660/2-74-092 |
| Stone, R. | EPA-600/5-73-003 |
| Stone, R. | EPA-670/2-74-095a |
| Stone, R. | EPA-670/2-74-095b |
| Streebin, L. E. | EPA-660/2-74-037 |
| Streiff, M. L. | EPA-650/2-73-026 |
| Streiter, S. | EPA-600/5-75-007 |
| Strom, A. | EPA-670/2-75-045 |
| Stucky, D. J. | EPA-670/2-74-050 |
| Sturrock, T. | EPA-660/3-74-007 |
| Sullivan, R. H. | EPA-670/2-74-039 |
| Sullivan, R. H. | EPA-670/2-74-026 |
| Sumark, L. | EPA-600/5-73-016 |
| Summerfelt, R. C. | EPA-660/2-74-046 |
| Summers, C. H. | EPA-670/2-74-086 |
| Surprenant, N. | EPA-600/5-74-032 |
| Sutton, J. W. | EPA-660/2-73-018 |
| Sutton, W. W. | EPA-680/4-75-003 |
| Swaezy, R. M. | EPA-660/2-74-090 |
| Swain, H. | EPA-670/2-75-006 |
| Swanson, J. W. | EPA-660/2-74-029 |
| Sweeny, K. H. | EPA-660/2-74-036 |
| Swink, D. | EPA-600/9-75-002 |
| Sybert, L. | EPA-650/2-73-013 |
| Sybert, L. | EPA-650/2-74-010 |
| Sylvester, J. R. | EPA-660/3-75-015 |
| Szabo, A. J. | EPA-660/2-74-061 |
| Talley, R. J. | EPA-670/5-74-005 |
| Tam, S. S. | EPA-650/2-75-038 |
| Tang, J. Y. | EPA-650/3-73-002 |
| Taras, M. J. | EPA-660/2-73-020 |
| Tarazi, D. S. | EPA-660/3-74-026 |
| Tarzynski, J. | EPA-670/2-75-002 |
| Tate, D. C. | EPA-660/2-73-019 |
| Taub, F. B. | EPA-660/3-73-008 |
| Taylor, C. E. | EPA-660/2-74-001 |
| Taylor, J. | EPA-660/2-74-084 |
| Taylor, J. H. | EPA-660/2-74-052 |
| Taylor, W. J. | EPA-660/2-74-001 |
| Tessier, T. L. | EPA-660/2-74-056 |
| Teuschler, J. M. | EPA-670/4-75-002 |
| Thackston, E. L. | EPA-660/3-75-002 |
| Thaxton, E. L. | EPA-660/2-74-085 |
| Thibodeaux, L. J. | EPA-660/2-74-044 |
| Thomann, R. V. | EPA-660/3-73-009 |
| Thomann, R. V. | EPA-660/3-75-005 |
| Thomas Jr., J. | EPA-650/2-73-044 |
| Thomas, C. R. | EPA-670/2-74-073 |
| Thomas, J. L. | EPA-660/2-74-014 |
| Thomas, J. W. | EPA-660/2-74-057 |
| Thomas, R. E. | EPA-650/4-74-021 |
| Thomas, R. E. | EPA-650/4-74-022 |
| Thomas, R. E. | EPA-660/2-74-062 |
| Thomas, R. E. | EPA-660/2-74-087 |
| Thompson, C. G. | EPA-660/2-75-006 |
| Thorhaug, A. | EPA-660/3-74-003 |
| Thornton, W. E. | EPA-660/2-73-032 |
| Thurnau, R. C. | EPA-670/2-75-025 |
| Thurow, C. | EPA-600/5-75-005 |
| Tibbs, J. F. | EPA-660/3-74-023 |
| Tichenor, B. A. | EPA-660/2-73-016 |
| Tifft, Jr., E. C. | EPA-670/2-75-021 |
| Tihansky, D. P. | EPA-600/5-73-001 |
| Tillery, J. B. | EPA-650/1-74-003 |
| Tilton, B. | EPA-650/2-73-053 |
| Tilton, B. | EPA-650/2-74-015 |
| Timpe, W. G. | EPA-660/2-75-004 |
| Tinsley, C. H. | EPA-660/3-74-004a |
| Todd, D. K. | EPA-600/4-74-001 |
| Tomlinson, S. V. | EPA-600/2-75-006 |
| Tommerdahl, J. B. | EPA-650/2-74-019 |
| Toner, W. | EPA-600/5-75-005 |
| Torpey, W. N. | EPA-670/2-73-027 |
| Torstrick, R. L. | EPA-600/2-75-006 |
| Toussaint, G. R. | EPA-660/2-74-077 |
| Tripler Jr., A. B. | EPA-670/2-75-018 |
| Troxler, R. W. | EPA-660/3-75-002 |
| Truett, D. B. | EPA-600/2-75-007a |
| Truett, J. B. | EPA-650/2-74-030 |
| Trzyna, T. C. | EPA-600/5-74-023 |
| Trzyna, T. C. | EPA-600/5-74-006 |
| Tsang, P. | EPA-650/2-74-006 |
| Tucker, U. C. | EPA-650/2-73-027 |
| Tulumello, A. | EPA-670/2-74-087 |
| Turner, D. S. | EPA-660/3-74-029 |
| Turner, J. H. | EPA-650/2-73-012 |
| Tuwiner, S. B. | EPA-660/2-74-035 |
| Uchida, S. | EPA-650/2-73-003 |
| Ulmer, N. S. | EPA-670/2-74-007 |
| Ung, R. F. | EPA-670/2-74-018 |
| Unger, S. G. | EPA-600/5-73-008a |
| Unger, S. G. | EPA-600/5-74-028 |
| Upham, J. B. | EPA-650/3-74-008 |
| Usinowicz, P. J. | EPA-670/2-74-012 |
| Uttormark, P. D. | EPA-660/3-74-020 |
| Uttormark, P. D. | EPA-660/3-73-023 |
| Valentine, J. R. | EPA-650/2-73-032 |
| Vallee, R. P. | EPA-670/2-74-076a |
| Vallee, R. P. | EPA-670/2-74-076b |
| Van der Leeden, F. | EPA-660/3-75-018 |
| Van Beek, J. L. | EPA-600/5-75-006 |
| Van Dam, D. | EPA-670/2-73-103 |
| Van Der Leeden, F. | EPA-600/4-73-001a |
| Van Winkle, M. | EPA-600/5-73-012c |
| Vandergrift, A. E. | EPA-670/2-74-048 |
| Vasan, K. S. | EPA-670/5-74-008 |
| Vaughan, D. A. | EPA-670/2-73-032 |
| Vaughan, D. A. | EPA-670/2-75-058 |

# PERSONAL AUTHOR INDEX

| | |
|---|---|
| Veith, G. D. | EPA-660/3–75–022 |
| Vennes, J. | EPA-660/2–74–088 |
| Vick, N. J. | EPA-670/5–74–001 |
| Vivian, J. E. | EPA-650/2–73–047 |
| Vlastelicia, J. | EPA-660/3–73–014 |
| Vogh, R. P. | EPA-660/2–74–055 |
| Waddell, T. E. | EPA-600/5–74–012 |
| Wade, R. C. | EPA-650/2–73–052 |
| Wagner, J. J. | EPA-600/5–75–001 |
| Wagoner, D. E. | EPA-650/4–74–005a |
| Wahl, J. A. | EPA-650/2–74–008a |
| Wakeland, J. R. | EPA-600/5–73–012c |
| Waldron, A. C. | EPA-660/2–74–032 |
| Walker, W. R. | EPA-660/2–74–052 |
| Walker, W. R. | EPA-660/2–74–049 |
| Walker, W. R. | EPA-660/2–74–084 |
| Wallace, J. B. | EPA-660/3–73–016 |
| Waller, R. | EPA-670/2–74–097 |
| Wallingford, G. W. | EPA-660/2–75–010 |
| Wallman, H. | EPA-670/2–74–071 |
| Waltz, F. A. | EPA-670/4–73–002 |
| Wang, S. C. | EPA-650/2–74–010 |
| Wapner, M. | EPA-660/3–75–023 |
| Warg, J. B. | EPA-670/2–75–047 |
| Warner, D. L. | EPA-680/4–74–003 |
| Warner, M. | EPA-600/5–74–002 |
| Warner, M. | EPA-600/5–74–016 |
| Warner, W. K. | EPA-600/5–74–011 |
| Wasser, J. H. | EPA-650/2–74–003 |
| Wasser, J. U. | EPA-650/2–73–029 |
| Wathne, M. | EPA-670/2–74–035a |
| Watkins, S. W. | EPA-660/2–73–028 |
| Watson Jr., W. D. | EPA-600/5–73–014 |
| Watt, T. R. | EPA-670/2–75–020 |
| Weber Jr., W. J. | EPA-670/2–75–061 |
| Weber Jr., W. J. | EPA-670/2–74–047 |
| Weber Jr., W. J. | EPA-670/2–74–012 |
| Weber, C. I. | EPA-670/4–73–001 |
| Weet, J. H. | EPA-670/2–75–015 |
| Weinberg, E. K. | EPA-650/2–73–014 |
| Weinburg, M. S. | EPA-670/2–73–062 |
| Weinstein, M. J. | EPA-670/2–74–052 |
| Weisberg, H. | EPA-670/2–74–044 |
| Weiss, A. H. | EPA-670/2–75–031 |
| Weiss, B. | EPA-670/2–73–049 |
| Welborn, H. L. | EPA-670/2–74–075 |
| Welsh, F. L. | EPA-670/2–74–050 |
| Wen, C. Y. | EPA-650/2–73–003 |
| Wendt, J. O. | EPA-650/2–74–017 |
| Wezernak, C. T. | EPA-660/3–74–028 |
| Wheeler, R. J. | EPA-650/2–74–068 |
| Whitacre, G. R. | EPA-650/2–74–011 |
| White, J. E. | EPA-660/2–74–027 |
| White, J. T. | EPA-660/2–75–001 |
| White, R. K. | EPA-600/2–75–009 |
| White, U. M. | EPA-650/2–73–014 |
| White, W. | EPA-650/2–73–017 |
| Whitman, J. | EPA-600/4–75–001 |
| Whitmore, F. J. | EPA-650/4–73–003 |
| Wickersham, K. | EPA-600/5–75–008 |
| Wilcox, E. A. | EPA-670/2–73–042 |
| Wiley, A. J. | EPA-660/2–73–030 |
| Will, L. A. | EPA-660/2–75–012 |
| Williams, D. | EPA-650/2–73–050 |
| Williams, E. R. | EPA-600/5–73–013 |
| Wilmoth, R. C. | EPA-670/2–73–100 |
| Wilmoth, R. C. | EPA-670/2–74–051 |
| Wilson, D. G. | EPA-670/2–75–040 |
| Wilson, K. D. | EPA-670/2–75–063 |
| Winfield, R. P. | EPA-660/3–75–005 |
| Winiarski, L. | EPA-660/2–73–001 |
| Winkler, P. F. | EPA-670/2–74–031 |
| Wirtanen, W. T. | EPA-660/2–73–036 |
| Wise, R. H. | EPA-670/2–74–034 |
| Wise, R. H. | EPA-670/2–74–046 |
| Wixon, B. G. | EPA-670/2–75–053 |
| Wixson, B. G. | EPA-670/2–73–038 |
| Wolcott, A. R. | EPA-660/2–74–057 |
| Wolk, R. H. | EPA-650/2–73–041 |
| Wolk, R. H. | EPA-670/2–73–066 |
| Wood, A. L. | EPA-660/2–75–009 |
| Woodward, J. B. | EPA-670/2–74–054 |
| Wren, E. J. | EPA-670/2–73–021 |
| Wymore, A. H. | EPA-660/2–74–027 |
| Yaffe, H. J. | EPA-670/5–74–009 |
| Yanagida, N. | EPA-660/2–74–053 |
| Yang, P. Y. | EPA-660/2–74–063 |
| Yin, S. C. | EPA-660/2–74–046 |
| Young, J. F. | EPA-600/2–75–006 |
| Yousef, Y. A. | EPA-670/2–74–072 |
| Zachar, F. R. | EPA-670/2–74–002 |
| Zakely, B. J. | EPA-660/2–74–049 |
| Zandi, I. | EPA-670/2–73–072 |
| Zaval, F. J. | EPA-670/2–74–003 |
| Ziegler, R. C. | EPA-670/2–75–042 |
| Zippler, K. L. | EPA-670/2–73–071 |
| Zoller, M. A. | EPA-600/5–73–012c |

| PROJECT NO. | REPORT NO. |
|---|---|
| CONTRACTS | |
| CPE-70-129 | 670/2-73-010 |
| DACW 37-74-C-00 | 670/2-75-050a |
| DACW 37-74-C-00 | 670/2-75-050b |
| DACW 37-74-C-00 | 670/2-75-050c |
| DACW 37-74-C-00 | 670/2-75-050d |
| DACW 37-74-C-00 | 670/2-75-050e |
| DACW 37-74-C-00 | 670/2-75-050f |
| DACW 37-74-C-00 | 670/2-75-050g |
| EHS 70-108 | 670/2-74-092 |
| GS-03S-38351 | 600/5-73-013 |
| PH 22-68-67 | 650/2-75-047 |
| 10-12-0007 | 650/1-74-005 |
| 10-12-0019 | 650/2-74-001 |
| 10-12-0023 | 650/2-73-022 |
| 10-12-0040 | 650/4-74-027 |
| 10-12-0049 | 650/4-73-002 |
| 10-12-0061 | 650/2-74-077 |
| 10-12-0088 | 650/2-74-012 |
| 10-12-0134 | 650/1-74-006 |
| 10-12-0143 | 650/2-74-024 |
| 10-12-0162 | 650/2-74-022 |
| 10-12-0166 | 650/2-74-132 |
| 12-12-0097 | 650/1-74-001 |
| 12-12-0139 | 650/2-74-053 |
| 14-12-0024 | 660/2-74-050 |
| 14-12-0024 | 670/2-74-050 |
| 14-12-0168 | 670/2-74-048 |
| 14-12-0179 | 670/2-73-076 |
| 14-12-0494 | 670/2-75-002 |
| 14-12-0505 | 670/2-73-047a |
| 14-12-0813 | 670/2-73-062 |
| 14-12-0818 | 660/2-73-033 |
| 14-12-0818 | 670/2-73-033 |
| 14-12-0818 | 670/2-73-037 |
| 14-12-0818 | 670/2-73-040 |
| 14-12-0818 | 670/2-73-058 |
| 14-12-0818 | 670/2-73-070 |
| 14-12-0818 | 670/2-73-073 |
| 14-12-0818 | 670/2-73-075 |
| 14-12-0820 | 670/2-74-025 |
| 14-12-0824 | 670/2-74-074 |
| 14-12-0831 | 670/2-75-009 |
| 14-12-0833 | 660/2-74-076 |
| 14-12-0846 | 670/2-73-042 |
| 14-12-0909 | 600/2-73-002 |
| 14-12-0922 | 660/2-74-036 |
| 22-68-0002 | 650/3-74-008 |

| PROJECT NO. | REPORT NO. |
|---|---|
| CONTRACTS | |
| 22-69-0064 | 650/3-73-001 |
| 22-69-108 | 650/4-75-002 |
| 24-12-0004 | 650/2-74-084 |
| 24-12-0015 | 650/2-73-049 |
| 24-12-0025 | 650/2-73-024 |
| 24-12-0027 | 650/2-73-023 |
| 24-12-0029 | 650/2-74-018 |
| 24-12-0045 | 650/2-74-017 |
| 35-12-0067 | 650/2-73-013 |
| 35-12-0067 | 650/2-74-010 |
| 43-12-0142 | 650/1-74-007 |
| 68-01-0040 | 670/2-75-028 |
| 68-01-0041 | 670/2-74-071 |
| 68-01-0067 | 670/2-73-084 |
| 68-01-0068 | 670/2-73-068 |
| 68-01-0076 | 660/3-73-006 |
| 68-01-0082 | 670/4-74-004 |
| 68-01-0094 | 670/2-74-017 |
| 68-01-0095 | 670/2-74-004 |
| 68-01-0098 | 670/2-75-057 |
| 68-01-0110 | 670/2-75-042 |
| 68-01-0115 | 670/2-74-091 |
| 68-01-0116 | 670/2-74-043 |
| 68-01-0120 | 670/2-73-031 |
| 68-01-0124 | 670/2-73-078 |
| 68-01-0133 | 670/2-74-053 |
| 68-01-0135 | 670/2-73-081 |
| 68-01-0139 | 670/2-73-069 |
| 68-01-0162 | 670/2-75-051 |
| 68-01-0162 | 670/2-75-052 |
| 68-01-0167 | 660/2-73-003 |
| 68-01-0171 | 660/2-73-004 |
| 68-01-0190 | 660/3-75-016 |
| 68-01-0195 | 670/2-74-001 |
| 68-01-0197 | 600/2-75-004 |
| 68-01-0276 | 650/3-74-002 |
| 68-01-0279 | 650/2-73-002 |
| 68-01-0423 | 600/5-74-017 |
| 68-01-0426 | 600/5-74-009 |
| 68-01-0428 | 600/5-74-007 |
| 68-01-0438 | 600/2-74-004 |
| 68-01-0457 | 600/2-74-006 |
| 68-01-0465 | 670/2-75-047 |
| 68-01-0470 | 600/5-73-004 |
| 68-01-0483 | 600/2-74-002 |
| 68-01-0483 | 600/2-75-009 |
| 68-01-0550 | 650/2-74-068 |

| PROJECT NO. | REPORT NO. | PROJECT NO. | REPORT NO. |
|---|---|---|---|
| CONTRACTS | | CONTRACTS | |
| 68-01-0666 | 650/1-73-002 | 68-01-2442 | 600/4-75-001 |
| 68-01-0703 | 600/5-74-004 | 68-01-2637 | 600/5-74-028 |
| 68-01-0728 | 600/5-74-010 | 68-02-0007 | 650/2-74-064 |
| 68-01-0729 | 600/5-73-003 | 68-02-0010 | 650/4-74-037 |
| 68-01-0741 | 660/2-73-006a | 68-02-0017 | 650/2-74-047 |
| 68-01-0741 | 660/2-73-006b | 68-02-0018 | 650/2-73-047 |
| 68-01-0743 | 660/2-74-072 | 68-02-0020 | 650/2-73-026 |
| 68-01-0743 | 660/2-74-073 | 68-02-0022 | 650/2-73-015 |
| 68-01-0744 | 600/5-73-008a | 68-02-0023 | 650/2-75-006 |
| 68-01-0744 | 600/5-73-008b | 68-02-0025 | 650/2-74-085a |
| 68-01-0744 | 600/5-74-014 | 68-02-0054 | 650/2-73-027 |
| 68-01-0753 | 600/5-73-005 | 68-02-0080 | 650/1-73-004 |
| 68-01-0759 | 600/4-73-001a | 68-02-0083 | 650/1-75-001 |
| 68-01-0759 | 600/4-73-001b | 68-02-0095 | 650/5-73-001 |
| 68-01-0759 | 600/4-74-001 | 68-02-0205 | 650/2-73-001 |
| 68-01-0759 | 680/4-74-002 | 68-02-0206 | 650/2-73-042 |
| 68-01-0759 | 680/4-74-003 | 68-02-0213 | 650/5-73-002 |
| 68-01-0763 | 670/2-74-002 | 68-02-0214 | 650/4-74-014 |
| 68-01-0777 | 660/2-74-056 | 68-02-0216 | 650/2-73-033a |
| 68-01-0782 | 660/3-74-019 | 68-02-0216 | 650/2-73-033b |
| 68-01-0788 | 600/5-74-008 | 68-02-0217 | 650/2-73-048a |
| 68-01-0887 | 660/2-74-013 | 68-02-0217 | 650/2-73-048b |
| 68-01-0901 | 600/5-75-011 | 68-02-0217 | 650/2-73-048c |
| 68-01-0904 | 660/3-74-022 | 68-02-0217 | 650/2-73-048d |
| 68-01-1805 | 600/5-74-001 | 68-02-0218 | 650/2-74-105 |
| 68-01-1818 | 600/5-74-006 | 68-02-0223 | 650/4-73-001 |
| 68-01-1818 | 600/5-74-023 | 68-02-0226 | 650/2-74-131 |
| 68-01-1832 | 670/4-74-003a | 68-02-0227 | 650/2-74-066 |
| 68-01-1832 | 670/4-74-003b | 68-02-0228 | 650/2-74-107 |
| 68-01-1837 | 600/5-74-005 | 68-02-0230 | 650/2-74-026 |
| 68-01-1842 | 600/5-74-019 | 68-02-0230 | 650/2-74-087 |
| 68-01-1845 | 600/5-75-006 | 68-02-0246 | 650/2-74-054 |
| 68-01-1850 | 600/5-74-033 | 68-02-0247 | 650/2-74-071a |
| 68-01-1859 | 600/5-74-032 | 68-02-0247 | 650/2-74-071b |
| 68-01-1863 | 600/5-75-004 | 68-02-0250 | 650/2-74-075 |
| 68-01-1870 | 670/2-74-052 | 68-02-0256 | 650/2-73-036 |
| 68-01-1871 | 600/5-74-002 | 68-02-0264 | 650/2-73-005 |
| 68-01-1871 | 600/5-74-016 | 68-02-0265 | 650/2-75-037 |
| 68-01-1882 | 600/5-74-030 | 68-02-0268 | 650/2-75-009 |
| 68-01-1888 | 600/5-74-018 | 68-02-0270 | 650/2-74-045 |
| 68-01-1898 | 600/5-74-015 | 68-02-0272 | 650/4-74-003 |
| 68-01-2114 | 600/2-74-001 | 68-02-0273 | 650/2-73-035 |
| 68-01-2203 | 600/5-74-025 | 68-02-0273 | 650/2-74-102 |
| 68-01-2203 | 600/5-74-026 | 68-02-0273 | 650/2-75-022 |
| 68-01-2221 | 600/2-75-011 | 68-02-0277 | 650/2-73-004 |
| 68-01-2250 | 600/5-75-007 | 68-02-0279 | 650/2-73-003 |
| 68-01-2411 | 600/5-75-001 | 68-02-0284 | 650/2-74-074 |

| PROJECT NO. | REPORT NO. |
|---|---|
| CONTRACTS | |
| 68-02-0284 | 650/2-74-092 |
| 68-02-0285 | 650/2-74-093 |
| 68-02-0286 | 650/2-74-004 |
| 68-02-0287 | 650/3-74-004a |
| 68-02-0293 | 650/2-73-041 |
| 68-02-0293 | 650/2-73-041a |
| 68-02-0297 | 650/2-75-045 |
| 68-02-0300 | 650/2-73-039 |
| 68-02-0300 | 650/2-74-109 |
| 68-02-0307 | 650/2-73-043 |
| 68-02-0310 | 650/4-74-015 |
| 68-02-0329 | 650/1-73-003 |
| 68-02-0332 | 650/2-74-061 |
| 68-02-0335 | 650/4-74-012 |
| 68-02-0543 | 650/2-73-037 |
| 68-02-0544 | 650/2-73-016 |
| 68-02-0545 | 650/2-74-040 |
| 68-02-0546 | 650/2-74-029 |
| 68-02-0551 | 650/2-73-010 |
| 68-02-0553 | 650/4-73-003 |
| 68-02-0556 | 650/9-75-001a |
| 68-02-0556 | 650/9-75-001b |
| 68-02-0557 | 650/3-73-002 |
| 68-02-0561 | 650/2-73-025 |
| 68-02-0563 | 650/2-74-014 |
| 68-02-0564 | 650/2-73-050 |
| 68-02-0566 | 650/2-74-044 |
| 68-02-0570 | 650/2-73-040 |
| 68-02-0574 | 650/4-74-009 |
| 68-02-0575 | 650/2-74-094 |
| 68-02-0578 | 650/2-73-052 |
| 68-02-0579 | 650/2-74-016 |
| 68-02-0580 | 650/4-74-011 |
| 68-02-0580 | 650/4-74-040 |
| 68-02-0581 | 650/2-74-060 |
| 68-02-0584 | 650/2-75-015 |
| 68-02-0585 | 650/2-73-032 |
| 68-02-0586 | 650/1-75-005 |
| 68-02-0587 | 650/2-73-030 |
| 68-02-0588 | 650/2-73-008 |
| 68-02-0590 | 650/2-74-039 |
| 68-02-0591 | 650/2-74-133 |
| 68-02-0592 | 650/2-75-013a |
| 68-02-0595 | 650/1-74-003 |
| 68-02-0600 | 650/2-73-007 |
| 68-02-0603 | 650/2-74-031a |
| 68-02-0603 | 650/2-74-031b |

| PROJECT NO. | REPORT NO. |
|---|---|
| CONTRACTS | |
| 68-02-0605 | 650/2-75-027a |
| 68-02-0605 | 650/2-75-027b |
| 68-02-0622 | 650/2-73-028 |
| 68-02-0623 | 650/4-74-013 |
| 68-02-0623 | 650/4-74-021 |
| 68-02-0623 | 650/4-74-024 |
| 68-02-0623 | 650/4-74-025 |
| 68-02-0625 | 650/2-74-103 |
| 68-02-0626 | 650/4-74-022 |
| 68-02-0626 | 650/4-74-026 |
| 68-02-0626 | 650/4-74-028 |
| 68-02-0626 | 650/4-74-029 |
| 68-02-0626 | 650/4-74-033 |
| 68-02-0626 | 650/4-74-039 |
| 68-02-0626 | 650/4-75-003 |
| 68-02-0626 | 650/4-75-009 |
| 68-02-0628 | 650/2-74-023 |
| 68-02-0629 | 650/2-74-009a |
| 68-02-0629 | 650/2-74-009b |
| 68-02-0629 | 650/2-74-009c |
| 68-02-0629 | 650/2-74-009d |
| 68-02-0629 | 650/2-74-009e |
| 68-02-0629 | 650/2-74-009f |
| 68-02-0629 | 650/2-74-009g |
| 68-02-0630 | 650/2-74-076 |
| 68-02-0634 | 650/2-74-002a |
| 68-02-0634 | 650/2-74-002b |
| 68-02-0636 | 650/2-75-020 |
| 68-02-0637 | 650/2-74-119a |
| 68-02-0647 | 650/2-74-025 |
| 68-02-0648 | 650/2-75-001a |
| 68-02-0648 | 650/2-75-001b |
| 68-02-0650 | 650/2-74-062 |
| 68-02-0650 | 650/2-74-062a |
| 68-02-0652 | 650/4-74-020 |
| 68-02-0653 | 650/2-74-069 |
| 68-02-0654 | 650/4-74-017 |
| 68-02-0656 | 650/2-74-020 |
| 68-02-0657 | 650/2-74-006 |
| 68-02-0658 | 650/2-73-009 |
| 68-02-0660 | 650/2-75-008 |
| 68-02-0662 | 650/2-74-008a |
| 68-02-0665 | 650/4-74-049 |
| 68-02-0680 | 650/4-74-010 |
| 68-02-0699 | 650/4-75-005 |
| 68-02-0713 | 650/1-74-013 |
| 68-02-0716 | 650/2-74-055 |

| PROJECT NO. | REPORT NO. |
|---|---|
| CONTRACTS | |
| 68-02-0742 | 650/2-74-089 |
| 68-02-0745 | 650/4-74-042 |
| 68-02-0757 | 650/2-74-046a |
| 68-02-0757 | 650/2-74-046b |
| 68-02-0760 | 650/4-74-051 |
| 68-02-0771 | 650/3-75-004 |
| 68-02-0778 | 650/2-74-056 |
| 68-02-0782 | 650/2-74-065 |
| 68-02-0788 | 650/4-74-052 |
| 68-02-0798 | 650/4-74-036 |
| 68-02-0800 | 650/4-74-044 |
| 68-02-0994 | 650/4-74-038 |
| 68-02-1010 | 650/2-74-037a |
| 68-02-1011 | 650/2-74-019 |
| 68-02-1013 | 650/2-75-031 |
| 68-02-1015 | 650/4-74-007 |
| 68-02-1068 | 650/2-74-106 |
| 68-02-1074 | 650/2-74-078a |
| 68-02-1079 | 650/2-74-108 |
| 68-02-1093 | 650/2-74-058 |
| 68-02-1098 | 650/4-74-023 |
| 68-02-1098 | 650/4-75-001 |
| 68-02-1145 | 650/1-74-009 |
| 68-02-1201 | 650/2-75-050 |
| 68-02-1206 | 650/4-75-008 |
| 68-02-1207 | 650/4-74-001 |
| 68-02-1208 | 650/2-75-041 |
| 68-02-1209 | 650/2-75-039 |
| 68-02-1210 | 650/2-75-049 |
| 68-02-1217 | 650/3-75-002 |
| 68-02-1225 | 650/2-74-059 |
| 68-02-1228 | 650/2-74-121 |
| 68-02-1229 | 650/2-74-120 |
| 68-02-1233 | 650/4-74-043 |
| 68-02-1234 | 650/4-74-005a |
| 68-02-1234 | 650/4-74-005b |
| 68-02-1234 | 650/4-74-005c |
| 68-02-1234 | 650/4-74-005d |
| 68-02-1234 | 650/4-74-005h |
| 68-02-1234 | 650/4-74-005m |
| 68-02-1234 | 650/4-74-005L |
| 68-02-1235 | 650/4-74-050 |
| 68-02-1238 | 650/4-74-006 |
| 68-02-1242 | 650/4-74-016 |
| 68-02-1255 | 650/2-75-007 |
| 68-02-1266 | 650/1-75-004 |
| 68-02-1268 | 650/2-75-029 |
| 68-02-1274 | 650/1-74-008 |
| 68-02-1277 | 650/1-75-002 |
| 68-02-1282 | 650/2-75-028 |
| 68-02-1303 | 650/2-74-079 |
| 68-02-1303 | 650/2-74-114 |
| 68-02-1303 | 650/2-74-124 |
| 68-02-1306 | 650/2-74-085b |
| 68-02-1306 | 650/2-74-086a |
| 68-02-1306 | 650/2-74-086b |
| 68-02-1308 | 650/2-74-028 |
| 68-02-1308 | 650/2-74-072 |
| 68-02-1308 | 650/2-74-098 |
| 68-02-1308 | 650/2-74-116 |
| 68-02-1308 | 650/2-74-127 |
| 68-02-1308 | 650/2-74-130 |
| 68-02-1308 | 650/2-75-016 |
| 68-02-1308 | 650/2-75-017 |
| 68-02-1308 | 650/2-75-030 |
| 68-02-1308 | 650/2-75-033 |
| 68-02-1309 | 650/2-75-018 |
| 68-02-1310 | 650/4-74-035 |
| 68-02-1314 | 650/2-75-042 |
| 68-02-1316 | 650/2-74-036 |
| 68-02-1316 | 650/2-74-043 |
| 68-02-1316 | 650/2-74-082a |
| 68-02-1318 | 650/2-74-091 |
| 68-02-1318 | 650/2-74-123 |
| 68-02-1319 | 650/2-74-033 |
| 68-02-1320 | 650/2-74-021 |
| 68-02-1320 | 650/2-74-041 |
| 68-02-1320 | 650/2-74-082 |
| 68-02-1320 | 650/2-74-117 |
| 68-02-1320 | 650/2-75-019a |
| 68-02-1320 | 650/2-75-046 |
| 68-02-1321 | 650/2-74-101 |
| 68-02-1321 | 650/2-74-115 |
| 68-02-1321 | 650/2-74-122 |
| 68-02-1323 | 650/2-74-052 |
| 68-02-1323 | 650/2-74-099 |
| 68-02-1323 | 650/2-74-100 |
| 68-02-1323 | 650/2-75-034 |
| 68-02-1323 | 650/2-75-038 |
| 68-02-1324 | 650/2-74-073 |
| 68-02-1324 | 650/2-75-044 |
| 68-02-1325 | 650/2-74-097 |
| 68-02-1325 | 650/2-74-118 |
| 68-02-1325 | 650/2-75-021 |

| PROJECT NO. | REPORT NO. |
|---|---|
| CONTRACTS | |
| 68-02-1328 | 650/2-74-112 |
| 68-02-1329 | 650/2-75-032a |
| 68-02-1329 | 650/2-75-032b |
| 68-02-1329 | 650/2-75-032c |
| 68-02-1339 | 650/2-74-067 |
| 68-02-1348 | 650/2-74-090 |
| 68-02-1352 | 650/2-74-030 |
| 68-02-1353 | 650/2-74-088 |
| 68-02-1363 | 650/4-74-019a |
| 68-02-1363 | 650/4-74-046 |
| 68-02-1363 | 650/4-75-011 |
| 68-02-1406 | 650/2-75-026a |
| 68-02-1406 | 650/2-75-026b |
| 68-02-1436 | 650/2-75-035 |
| 68-02-1480 | 650/2-74-129 |
| 68-02-1480 | 650/2-74-129a |
| 68-02-1487 | 650/2-75-024a |
| 68-02-1808 | 650/2-75-040 |
| 68-02-1851 | 650/2-75-005a |
| 68-02-1851 | 650/2-75-005b |
| 68-02-1973 | 650/2-73-045 |
| 68-02-2012 | 650/2-73-044 |
| 68-03-0006 | 670/2-73-052 |
| 68-03-0032 | 670/2-73-014 |
| 68-03-0032 | 670/2-73-015 |
| 68-03-0032 | 670/2-73-016 |
| 68-03-0046 | 670/2-73-013 |
| 68-03-0047 | 670/5-74-003 |
| 68-03-0049 | 670/2-73-006 |
| 68-03-0050 | 670/2-73-066 |
| 68-03-0060 | 670/2-73-056 |
| 68-03-0089 | 670/2-73-053A |
| 68-03-0089 | 670/2-73-053A-P |
| 68-03-0089 | 670/2-73-053B |
| 68-03-0089 | 670/2-73-053C |
| 68-03-0089 | 670/2-73-053D |
| 68-03-0089 | 670/2-73-053E |
| 68-03-0089 | 670/2-73-053F |
| 68-03-0089 | 670/2-73-053G |
| 68-03-0089 | 670/2-73-053H |
| 68-03-0089 | 670/2-73-053I |
| 68-03-0089 | 670/2-73-053J |
| 68-03-0089 | 670/2-73-053K |
| 68-03-0089 | 670/2-73-053L |
| 68-03-0089 | 670/2-73-053M |
| 68-03-0089 | 670/2-73-053N |
| 68-03-0089 | 670/2-73-053O |
| CONTRACTS | |
| 68-03-0089 | 670/2-73-053P |
| 68-03-0095 | 670/2-74-019 |
| 68-03-0095 | 670/2-74-020 |
| 68-03-0095 | 670/2-74-021 |
| 68-03-0102 | 670/2-75-045 |
| 68-03-0123 | 670/2-75-024 |
| 68-03-0128 | 670/2-75-023 |
| 68-03-0138 | 670/2-74-078 |
| 68-03-0140 | 670/2-75-049 |
| 68-03-0145 | 670/2-75-014 |
| 68-03-0148 | 670/2-75-038 |
| 68-03-0154 | 670/2-74-033 |
| 68-03-0154 | 670/2-74-045 |
| 68-03-0154 | 670/2-74-086 |
| 68-03-0156 | 670/2-73-086 |
| 68-03-0179 | 670/2-74-040 |
| 68-03-0183 | 670/2-74-037 |
| 68-03-0183 | 670/2-74-038 |
| 68-03-0183 | 670/2-74-065 |
| 68-03-0183 | 670/2-74-066 |
| 68-03-0183 | 670/2-74-068 |
| 68-03-0193 | 670/5-75-001 |
| 68-03-0203 | 670/2-75-012 |
| 68-03-0220 | 670/2-74-056 |
| 68-03-0221 | 670/2-75-007 |
| 68-03-0228 | 670/2-75-004 |
| 68-03-0233 | 660/2-73-026 |
| 68-03-0244 | 670/2-74-095a |
| 68-03-0244 | 670/2-74-095b |
| 68-03-0260 | 670/2-74-082 |
| 68-03-0262 | 670/2-74-087 |
| 68-03-0268 | 670/2-74-003 |
| 68-03-0272 | 670/2-75-011 |
| 68-03-0283 | 670/2-74-039 |
| 68-03-0288 | 660/3-75-024 |
| 68-03-0298 | 660/3-75-018 |
| 68-03-2136 | 660/2-75-011 |
| 802113 | 670/2-75-055 |
| GRANTS | |
| AP 01186 | 650/3-74-003 |
| AP-01269-02 | 650/2-74-005 |
| EC-00281 | 670/9-73-035 |
| EC-0030-03 | 670/2-73-089A |
| EC-0030-03 | 670/2-73-089B |
| EC-00600 | 670/5-74-002 |
| EP-00242 | 670/2-74-027 |
| EP-00248 | 670/2-73-023 |

| PROJECT NO. | REPORT NO. | PROJECT NO. | REPORT NO. |
|---|---|---|---|
| GRANTS | | GRANTS | |
| EP-00250 | 670/2-73-063 | 11010 ENK | 670/2-73-103 |
| EP-00254 | 670/2-73-085 | 11010 EZQ | 670/2-73-098 |
| EP-00257 | 670/2-73-065 | 11010 FLQ | 670/2-73-050 |
| EP-00259 | 670/2-73-072 | 11010 FYM | 670/2-73-033 |
| EP-00261 | 670/2-73-048 | 11010 GWI | 600/2-73-004 |
| EP-00262-02 | 670/2-73-009 | 11010DYO | 670/2-75-060 |
| EP-00265 | 670/2-73-083 | 11020 FAM | 670/2-74-079 |
| EP-00266 | 670/2-73-039 | 11020 FAN | 670/2-73-071 |
| EP-00268 | 670/2-73-061 | 11020 FAX | 670/2-75-020 |
| EP-00274 | 670/2-73-090 | 11022 ELK | 670/2-74-022 |
| EP-00276-04 | 670/2-73-005 | 11022 FLV | 670/2-75-035 |
| EP-00279 | 670/2-73-011 | 11023 EKC | 670/2-75-019 |
| EP-00283 | 670/2-73-025 | 11023 FAR | 670/2-75-010 |
| EP-00302 | 670/2-73-051 | 11023 FAS | 670/2-73-067 |
| EP-00304 | 670/2-73-087 | 11024 EVF | 600/2-73-002 |
| EP-00316 | 670/2-73-041 | 11030 HJP | 670/2-74-096 |
| EP-00319 | 670/2-73-034 | 11060 DRO | 660/2-73-038 |
| EP-00328 | 670/2-73-095 | 11060 GVT | 670/2-74-062 |
| EP-00329 | 660/2-73-038 | 12010 DNF | 660/2-74-050 |
| EP-00329 | 670/2-73-038 | 12010 DOT | 670/2-74-059 |
| EP-00329 | 670/2-75-053 | 12010 DRH | 660/2-73-033 |
| EP-00362 | 670/2-73-030 | 12010 DSA | 670/2-74-042 |
| EP-00386 | 670/2-73-049 | 12010 FNM | 660/2-73-032 |
| EP-00393 | 670/2-73-021 | 12010 FXD | 670/2-75-018 |
| EP-00458 | 670/5-73-020 | 12020 ERM | 670/2-74-044 |
| EP-00458 | 670/5-74-001 | 12040 DEH | 660/2-74-069 |
| EP-00500-01 | 670/2-74-014 | 12040 DRY | 660/2-74-008 |
| EP-01030 | 670/5-74-006 | 12040 EJU | 660/2-75-004 |
| P5-01-1805 | 600/1-75-002 | 12040 GQD | 660/2-73-028 |
| UI-00509 | 670/2-73-057 | 12040 HDU | 660/2-74-086 |
| UI-00557 | 670/2-73-017 | 12060 DFF | 660/2-74-027 |
| WP 01351-01 | 660/3-74-014 | 12060 DQV | 660/2-73-015 |
| WP-01322-02 | 670/2-73-027 | 12060 EGV | 660/2-74-031 |
| WPD 184-01-67 | 660/2-74-030 | 12060 EIG | 660/2-74-088 |
| WPD-112-01-66 | 670/2-75-054 | 12060 EKQ | 660/2-74-012 |
| WPRD 121-01-68 | 670/2-73-024 | 12060 ESC | 660/2-74-093 |
| WPRD 16-01-67 | 670/2-75-037 | 12060 ESY | 660/2-74-035 |
| WPRD 185-01-68 | 660/2-73-015 | 12060 FAK | 660/2-74-028 |
| WPRD 23-01-68 | 670/2-73-098 | 12060 FLL | 660/2-74-014 |
| WPRD 242-01 | 670/2-73-092 | 12060 FRW | 660/2-73-020 |
| WPRD 247-01 | 670/2-74-061 | 12060 FRW | 660/2-73-021 |
| WPRD 3-01-68 | 660/2-74-035 | 12060 FYG | 660/2-74-060 |
| WPRD 30-01-0067 | 670/2-73-096 | 12060 HCW | 660/2-74-059 |
| WPRD 4-01-67 | 670/2-74-077 | 12060 HFY | 660/2-74-092 |
| WPRD 4-01-67 | 670/2-75-027 | 12060 HNG | 660/2-74-046 |
| 01EP00829 | 660/2-74-081 | 12060 HPC | 660/2-75-002 |
| 11010 ELP | 670/2-73-024 | 12070 HEK | 660/2-73-023 |

GRANTS

| PROJECT NO. | REPORT NO. |
|---|---|
| 12080 GCH | 660/2-74-040 |
| 12090 HLO | 660/2-74-039 |
| 12110 GLP | 660/2-73-018 |
| 12120 FYV | 660/2-73-037 |
| 12120 GLE | 660/2-74-007 |
| 12120 HMZ | 660/2-75-006 |
| 12130 DBF | 660/2-73-010 |
| 12130 EKK | 660/2-74-020 |
| 12130 HFX | 660/2-73-036 |
| 12130 HRA | 660/2-74-055 |
| 13020 DTV | 660/2-74-005 |
| 13020 DWH | 660/2-74-033 |
| 13020 EBL | 660/2-74-032 |
| 13040 DFN | 660/2-74-030 |
| 13040 ERR | 660/2-74-009 |
| 13040 EVM | 660/2-74-047 |
| 13040 FYK | 660/2-74-057 |
| 14010 EFJ | 670/2-73-092 |
| 14010 EFL | 670/2-73-054 |
| 14010 EFN | 670/2-73-093 |
| 14010 HQC | 670/2-74-009 |
| 14020 EHW | 660/2-74-019 |
| 14020 FVW | 660/2-74-037 |
| 14040 FVD | 660/2-74-018 |
| 14040 FZC | 670/2-73-080 |
| 15010 PBK | 670/2-73-088 |
| 15020 HKQ | 670/2-74-063 |
| 15030 FMZ | 660/2-73-035 |
| 15030 HIX | 660/2-74-043 |
| 15080 EJQ | 670/2-73-099 |
| 15080 HET | 670/2-73-068 |
| 16010 DBU | 660/3-74-034 |
| 16010 DCK | 660/3-73-002 |
| 16010 DFI | 660/3-73-001 |
| 16010 DHN | 660/3-73-003 |
| 16010 EDJ | 660/3-73-006 |
| 16010 EJH | 660/3-73-015 |
| 16010 ELF | 660/3-74-017 |
| 16010 EQQ | 660/2-74-010 |
| 16020 DHD | 670/2-73-079 |
| 16020 EDG | 660/2-74-021 |
| 16020 EGG | 660/3-74-026 |
| 16020 GIY | 670/4-74-004 |
| 16030 ELZ | 660/2-73-027 |
| 16040 FRL | 660/2-73-008 |
| 16050 DDK | 660/3-73-009 |
| 16050 DIL | 660/2-74-082 |
| 16050 DIL | 660/2-74-083 |
| 16050 DIL | 660/3-73-011 |
| 16050 DXM | 660/3-73-008 |
| 16050 ESP | 660/3-74-002 |
| 16050 GQQ | 660/3-73-025 |
| 16070 DEP | 660/3-74-004a |
| 16070 DEP | 660/3-74-004b |
| 16070 DGY | 660/3-73-010 |
| 16070 EKZ | 660/3-73-005 |
| 16070 FBY | 660/2-73-029 |
| 16080 DYJ | 660/2-74-016 |
| 16080 FBH | 660/2-73-022 |
| 16080 FWE | 600/2-74-003 |
| 16080 FYW | 660/2-73-025a |
| 16080 FYW | 660/2-73-025b |
| 16100 FWQ | 660/3-73-018 |
| 16100 PAK | 660/2-73-017 |
| 16110 GEW | 600/5-74-013 |
| 16130 FDQ | 660/2-73-012 |
| 16130 GNK | 660/2-73-011 |
| 16130 GSD | 660/2-73-003 |
| 16130 HKK | 660/2-73-004 |
| 17010 EBM | 670/2-73-027 |
| 17020 EPF | 670/2-74-012 |
| 17030 DMA | 670/2-73-074 |
| 17030 DUW | 670/2-74-047 |
| 17040 DSR | 670/2-74-077 |
| 17050 DBI | 670/2-74-018 |
| 17050 EEY | 670/2-74-048 |
| 17060 DNU | 670/2-73-029 |
| 17060 EYZ | 670/2-73-082 |
| 17070 HDA | 670/2-74-004 |
| 17080 FSF | 670/2-73-064 |
| 17080 HHV | 670/2-74-080 |
| 18050 DET | 660/3-74-003 |
| 18050 DFQ | 660/3-73-016 |
| 18050 DIJ | 660/3-73-020 |
| 18050 DMB | 660/3-73-017 |
| 18050 DPL | 660/3-73-019 |
| 18050 ELT | 660/3-74-006 |
| 18050 FLS | 660/3-73-004 |
| 18080 DFU | 660/3-74-014 |
| 18080 FBW | 660/3-74-031 |
| 800042 | 650/2-75-002 |
| 800055 | 660/2-73-032 |
| 800055 | 670/2-73-032 |
| 800055 | 670/2-74-083 |

| PROJECT NO. | REPORT NO. |
|---|---|
| GRANTS | |
| 800055 | 670/2-74-084 |
| 800150 | 650/2-74-034 |
| 800250 | 660/2-74-091 |
| 800261 | 660/2-73-019 |
| 800278 | 660/2-74-052 |
| 800278 | 660/2-74-084 |
| 800316 | 650/2-74-110 |
| 800351 | 670/2-74-032 |
| 800356 | 670/2-75-039 |
| 800364 | 660/2-75-009 |
| 800365 | 660/3-75-013 |
| 800369 | 660/3-73-009 |
| 800373 | 660/3-74-016 |
| 800397 | 650/4-74-032 |
| 800397 | 650/4-74-045a |
| 800397 | 650/4-74-045b |
| 800400 | 660/2-74-005 |
| 800401 | 660/2-74-033 |
| 800426 | 660/2-74-049 |
| 800432 | 670/2-75-033a |
| 800432 | 670/2-75-033b |
| 800432 | 670/2-75-033c |
| 800432 | 670/2-75-033d |
| 800435 | 660/3-75-014 |
| 800510 | 660/3-73-022 |
| 800536 | 660/3-75-021 |
| 800602 | 670/2-74-030 |
| 800605 | 660/3-75-004 |
| 800608 | 660/3-75-022 |
| 800609 | 660/3-75-006 |
| 800610 | 660/3-75-005 |
| 800613 | 660/2-73-012 |
| 800613 | 660/2-74-085 |
| 800613 | 660/3-75-002 |
| 800650 | 670/2-74-013 |
| 800650 | 670/2-75-056 |
| 800652 | 670/2-74-015 |
| 800674 | 670/5-74-004 |
| 800677 | 650/3-75-003 |
| 800678 | 660/2-74-003 |
| 800680 | 660/2-73-024 |
| 800685 | 670/2-73-060 |
| 800688 | 670/2-75-031 |
| 800704 | 660/3-75-017 |
| 800707 | 670/2-73-022 |
| 800731 | 660/2-75-008 |
| 800736 | 660/3-74-025 |
| GRANTS | |
| 800745 | 670/2-74-070 |
| 800746 | 660/2-74-046 |
| 800747 | 660/2-74-025 |
| 800766 | 670/2-74-016 |
| 800767 | 660/2-74-063 |
| 800769 | 670/2-74-075 |
| 800778 | 660/3-74-028 |
| 800786 | 670/2-75-040 |
| 800842 | 650/2-74-011 |
| 800853 | 660/2-74-029 |
| 800854 | 660/2-74-071 |
| 800857 | 600/2-74-009a |
| 800857 | 600/2-74-009b |
| 800857 | 600/2-74-009c |
| 800866 | 650/2-73-011 |
| 800904 | 660/2-74-061 |
| 800909 | 660/2-74-004 |
| 800921 | 660/2-74-048 |
| 800923 | 660/2-75-013 |
| 800935 | 660/2-74-074 |
| 800938 | 670/2-75-030 |
| 800941 | 670/2-75-046 |
| 800943 | 660/2-74-053 |
| 800950 | 650/2-74-095 |
| 800966 | 670/2-74-049 |
| 800989 | 660/3-74-027 |
| 800991 | 660/2-74-079 |
| 800994 | 660/3-74-033 |
| 800997 | 660/2-73-002 |
| 801000 | 600/5-74-022 |
| 801003 | 660/3-75-003 |
| 801029 | 660/2-73-027 |
| 801036 | 660/3-74-007 |
| 801039 | 660/3-73-018 |
| 801040 | 660/2-75-005 |
| 801062 | 660/3-74-029 |
| 801065 | 660/2-74-090 |
| 801113 | 650/4-75-012 |
| 801120 | 650/4-74-004 |
| 801136 | 650/3-74-006 |
| 801159 | 670/2-74-057 |
| 801174 | 650/3-74-011 |
| 801207 | 660/2-73-030 |
| 801226 | 600/5-74-027 |
| 801234 | 600/5-74-011 |
| 801236 | 670/2-75-006 |
| 801282 | 670/2-74-076a |

GRANTS

| PROJECT NO. | REPORT NO. |
|---|---|
| 801282 | 670/2-74-076b |
| 801289 | 670/2-74-035a |
| 801289 | 670/2-74-035b |
| 801289 | 670/2-74-036a |
| 801289 | 670/2-74-036b |
| 801303 | 670/2-73-091 |
| 801321 | 650/2-73-020 |
| 801336 | 650/2-75-036 |
| 801340 | 650/3-74-007 |
| 801342 | 670/2-74-031 |
| 801343 | 660/3-74-020 |
| 801349 | 670/2-75-016 |
| 801361 | 660/3-73-023 |
| 801362 | 660/3-73-024 |
| 801374 | 600/5-73-016 |
| 801376 | 600/5-73-015 |
| 801393 | 650/1-74-010 |
| 801400 | 660/2-75-007 |
| 801411 | 600/5-74-020 |
| 801417 | 660/2-74-077 |
| 801419 | 600/5-75-003 |
| 801432 | 660/2-75-001 |
| 801446 | 650/2-74-007 |
| 801454 | 660/2-75-003 |
| 801454-01 | 660/2-74-024 |
| 801470 | 650/1-74-012 |
| 801473 | 600/5-73-012a |
| 801473 | 600/5-73-012b |
| 801473 | 600/5-73-012c |
| 801473 | 600/5-73-012d |
| 801473 | 600/5-73-012e |
| 801481 | 600/5-74-029 |
| 801484 | 660/2-74-006 |
| 801490 | 650/2-73-014 |
| 801500 | 600/5-74-024 |
| 801521 | 600/5-73-007 |
| 801522 | 600/5-73-011 |
| 801577 | 660/2-74-094 |
| 801603 | 650/2-74-063 |
| 801615 | 650/2-74-027 |
| 801622 | 670/2-75-034 |
| 801628 | 600/2-74-005 |
| 801630 | 670/2-74-094 |
| 801633 | 670/2-75-026a |
| 801633 | 670/2-75-026b |
| 801647 | 660/2-74-034 |
| 801650 | 650/1-74-011 |

GRANTS

| PROJECT NO. | REPORT NO. |
|---|---|
| 801658 | 670/2-73-043 |
| 801662 | 660/2-74-064 |
| 801666 | 660/2-74-068 |
| 801673 | 600/5-75-010 |
| 801677 | 670/2-74-024A |
| 801678 | 670/2-74-024B |
| 801684 | 660/2-74-075 |
| 801799 | 670/2-75-061 |
| 801799 | 670/2-75-062 |
| 801799 | 670/2-75-063 |
| 801799 | 670/2-75-064 |
| 801830 | 670/2-74-073 |
| 801835 | 660/2-74-054 |
| 801870 | 670/5-74-007 |
| 801870 | 670/5-74-008 |
| 801870 | 670/5-74-009 |
| 801872 | 670/2-75-043 |
| 801876 | 660/2-74-044 |
| 801944 | 670/2-75-032 |
| 801945 | 650/4-74-041 |
| 802005 | 650/1-74-002 |
| 802009-01 | 660/2-74-023 |
| 802032 | 660/2-74-011 |
| 802043 | 650/1-75-003 |
| 802205 | 660/2-75-012 |
| 802219 | 670/2-74-026 |
| 802219 | 670/2-75-022 |
| 802254 | 670/2-73-104 |
| 802254 | 670/2-74-008 |
| 802269 | 650/2-74-080 |
| 802270 | 650/2-74-051 |
| 802291 | 650/2-74-048 |
| 802310 | 600/2-75-007a |
| 802310 | 600/2-75-007b |
| 802348 | 660/3-75-015 |
| 802366 | 650/2-75-012 |
| 802400 | 670/2-75-021 |
| 802402 | 650/2-74-032 |
| 802411 | 670/2-75-017 |
| 802419-01 | 650/2-74-096 |
| 802423 | 600/5-75-008 |
| 802441 | 600/5-73-009 |
| 802443 | 600/5-75-005 |
| 802443 | 600/5-75-009 |
| 802444 | 600/5-74-021 |
| 802475 | 670/2-74-054 |
| 802495 | 670/4-74-005 |

| PROJECT NO. | REPORT NO. |
|---|---|
| GRANTS | |
| 802499-01 | 650/2-75-023 |
| 802614 | 670/2-74-023 |
| 802621 | 670/2-75-048 |
| 802637 | 670/2-75-015 |
| 802716 | 670/2-75-041 |
| 802726 | 650/2-75-043 |
| 802980-01 | 660/4-75-002 |
| 803021 | 660/2-75-010 |
| 803046-01 | 600/2-75-005 |
| 803056 | 600/5-75-012 |
| 803063 | 670/2-75-044 |
| 803063 | 670/2-75-059 |
| 803063-01 | 670/2-75-003 |
| 803111 | 670/2-75-058 |
| 803226-01 | 670/2-75-029 |
| 803294 | 670/9-75-004 |
| INTER-AGENCY | |
| IAG-D4-0377 | 650/2-75-048 |
| IAG-D4-0454 | 650/2-75-011 |
| IAG-097(D) | 650/2-75-014 |
| IAG-134(D) | 600/2-75-006 |

| PROJECT NO. | REPORT NO. |
|---|---|
| INTER-AGENCY | |
| IAG-141(D) | 660/3-75-011 |
| IAG-148(D) | 600/5-75-002 |
| IAG-152(D) | 660/3-75-010 |
| IAG-323 | 650/3-74-005 |
| IAG0020(D) | 650/2-74-038 |
| IAG0077(D) | 650/2-74-113 |
| IAG0085(D) | 650/2-73-006 |
| IAG0134(D) | 650/2-73-051 |
| IAG0139(D) | 650/2-74-070 |
| IAG0149(D) | 650/2-74-104 |
| IAG0177(D) | 650/2-73-034 |
| IAG0199(D) | 650/2-74-057 |
| IAG0215 | 650/2-74-125 |
| IAG085(D) | 650/2-75-004 |
| IAG31990A | 650/2-74-049a |
| IAG4H374(D) | 600/5-74-031 |
| IAG40377(D) | 650/4-74-030 |
| TV-30541A | 650/2-73-019a |
| TV-30541A | 650/2-73-019b |
| TV-30541A | 650/2-73-019c |

☆ U. S. GOVERNMENT PRINTING OFFICE: 1975-657-695/5301 Region No. 5-11